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How Shall the Administrator Choose His Teachers?

*A discussion of personal traits that are assets and
of characteristics that may be labeled liabilities in
men and women who fill the rôle of teachers*

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EVERY calling demands certain unique personal qualities of its workmen, and teaching is no exception to this law. The most essential of these required traits, however, are precisely the same as those that should be possessed by any person who is to live a rich and balanced life. The qualities may be classified under four headings: physical, mental, moral and social.

In the first group perhaps most important are a sound body, good posture and carriage, cleanliness, a voice that is pleasing and vibrant, abundant energy, health giving habits and modishness in dress. The schoolroom is no place for the sickly, the listless, the slothful or the slovenly. Teaching demands vigor, enthusiasm and good cheer, and these are concomitants of a healthy body properly controlled.

Fine Scholastic Record Is an Asset

Included in the second division of desirable personal traits are such qualities as mental alertness and responsiveness, broad outlooks upon numerous fields of knowledge and of life, a mastery of the subject matter to be taught, an intellectual curiosity that is constantly seeking new and interesting applications for the knowledge that is imparted, tolerance and the habit of analyzing and evaluating data in an objective scientific manner before forming permanent judgments. In short, the successful

teacher must ever be a conscientious student, for, contrary to some sophomoric utterances, scholarship counts and counts enormously in most walks of the business and professional world.

Other things being equal the student who has made a fine scholastic record in high school and college is preferred above his fellows when selections for responsible positions are being made. Thus, for a teacher, the Phi Beta Kappa key, the Sigma Psi triangle, the emblems of Pi Lambda Theta and Phi Delta Kappa are worth seeking and worth preserving. If these insignia cannot be won, then certainly as close an approximation as possible to the standards of scholarship represented by them should be sought. To-day the supply of certificated teachers is frequently much larger than the demand for their services. Consequently candidates who are only average in their general qualifications are finding it increasingly difficult to secure recognition from employing agents, while the person who is notably below average is not desired at all. Moreover, it now appears certain that the day has dawned when the ability and training represented by the Master's degree is to be the *sine qua non* for admission to the high school faculties of the more progressive school systems.

The third group of personal qualities demanded of teachers concerns such traits as self-confidence,

self-control, self-respect, force, initiative, integrity, balanced temperament and ability to carry responsibilities. Indeed, from the earliest beginnings of civilization the development of ethical character has been the first ultimate objective of education. As a potent means to this end, the living example of the teacher has been paramount. So to-day no person who is notably lacking in the primary qualities of a moral being can hope to gain consideration as a teacher. For the high school age is an age of hero worship and whether the teacher desires it or not his influence in shaping the ideals of manhood and womanhood for the youths under his tuition will be powerful. Moreover, merely from the standpoint of instructional efficiency moral qualities of many sorts are constantly needed, since these give rise in turn to such quasi moral qualities as good humor, tact and patience—traits that are daily required in every classroom.

A Winning Personality Is Essential

The fourth group of personal qualities needed by a teacher may be classified as social. They include such traits as sympathy and friendliness to pupils, cooperation with associates, loyalty to superiors, interest in community problems and activities and gracious manners and courteous consideration for all persons with whom the teacher may come in contact. Some of these qualities no doubt are inherited, most of them, however, are the results of environment and training. They are in short the finest fruits of a liberal culture, and liberal culture in turn is an accretion that comes from a slow unfolding of self through contact from day to day with the best that man has felt, and thought and done throughout the ages.

Many attempts have been made to describe the perfect teacher. None has of course been wholly satisfactory. So much depends on the experience and the vision of the speaker or writer. However a consideration of some of these formulations is helpful. A few are therefore presented here.

A year or so ago a class of seventy-six seniors at the University of Michigan was asked to list the elements that its members deemed characterized the successful teachers they had had in school and college. The list, with the number of times each particular trait was mentioned, was as follows:

Personal interest in pupils, that is, sympathy and friendliness	76
Teaching ability—ability to present the subject interestingly and to inspire and stimulate....	58
Personality	48
Genuine interest and enthusiasm for teaching and for the subject taught.....	43
Neat and attractive in appearance.....	41

Masterful knowledge of the subject taught.....	36
General knowledge or general culture.....	34
Knowledge of pupils.....	23
Sociable, human and friendly.....	23
Power to discipline.....	18
Cheerful and even tempered.....	16
Faith and confidence in pupils.....	15
A keen sense of humor.....	15
Willingness to help pupils and to cooperate.....	15
Fair but exacting in work assigned.....	14
A pleasing voice	13
Commanding the respect of pupils.....	13
Systematic in preparation of the day's work....	11
Vigor and health.....	9
Force, earnestness, self-confidence.....	9
Tactfulness	7
Ambitions to grow in service.....	7
Patience	6
Sincerity	6
Pleasing in manners.....	6
Participation in student activities.....	6
Resourcefulness	5
Capacity for hard work.....	3
Poise and dignity.....	3
Idealism	2
Ability to speak in public.....	2
Interest in the town.....	2
Trained	1
Traveled	1
Possessed of common sense.....	1

Similarly, some time ago a group of superintendents and principals of high schools was asked to list the most notable defects or causes of failure among inexperienced high school teachers. This list of items, with the percentages of the group of judges mentioning the particular items, is as follows:

	<i>Per Cent</i>
Inability to discipline.....	48
Inability to adapt themselves to school and classroom problems	42
Lack of scholarship.....	40
Use of college methods with immature boys and girls	38
Overestimation of the ability of the pupils....	32
Too much given to lecturing.....	25
Egotistical	24
Lack of knowledge of adolescence.....	20
Do not study their jobs sufficiently.....	18
Too many outside interests.....	15
Do not take their work seriously enough.....	14
Failure to get the pupils' point of view.....	12
Failure to relate classroom work to out-of-school activities	8
Disloyalty to fellow teachers and to superiors in rank	5

In like manner the most noticeable defects of college graduates who become teachers was listed by the same group of critics as follows:

	Per Cent
Failure to adjust their work to the ability of the immature pupils	62
Ignorance of the art of teaching.....	52
Use of college methods with high school pupils..	48
Attempt to allow college freedom in discipline..	40
Egotistical, do not take suggestions kindly.....	35
Do not take their work seriously enough.....	24
Lack of systematic and well organized plans....	18
Lack of tact.....	12
Tend to isolate the theoretical work.....	8
Do not give sufficient encouragement to the weaker pupils	4

A picture of a good teacher may be had by noting the items found on the teachers' efficiency rating forms kept by certain school administrators. The following are the copies of two such forms, one from Norfolk, Va., and the other from Warren, Pa.:

Teachers' Efficiency Rating Form—Norfolk, Va.

	General appearance
	Health
	Voice
	Tact
Personal	Self-control
and	Enthusiasm
Professional	Executive ability
Equipment	Academic preparation
	Professional preparation
	Teaching skill
	Use of English
	Understanding of children
	Ability to judge educational values
Technique	Choice of subject matter
of	Organization of subject matter
Teaching	Skill in motivating work
	Skill in stimulating thought
	Attention to individual needs
	Daily preparation
School	Care of light, heat and ventilation
Management	Neatness of room
	Care of routine
	Ability to inspire and win pupils
	Discipline
	Skill in habit formation
Cooperation	Cooperation and loyalty
and	Willingness to receive suggestions
Professional	Ability to secure the confidence
Growth	and cooperation of parents
	Professional interest and growth

Results
Attention and response of class
Growth of pupils in subject matter
General development of pupils
Moral influence

Teachers' Efficiency Rating Form—Warren, Pa.

	Knowledge of subject matter
	Evidence of preparation
	Use of English
Instruction	Clearness of aim
	Skill in presentation
	Care in assignment of work
	Participation and interest of class
Discipline	Control of group
	Development of pupil self-control
	Character building
	Effect on attendance of pupil
Professional	Regularity of attendance and
Attitude	punctuality
	Social service
	Care of physical welfare of child
	Cooperation
	Professional growth
Personal	General appearance
Attributes	Initiative and leadership
	Health
	Self-control
	Understanding of child life
	Use of voice
Routine	Accuracy and promptness of re-
	ports and records
	Classroom administration

Recently Pres. E. H. Wilkins, Oberlin College, Oberlin, Ohio, portrayed the good teacher in these words: "The good teacher knows his subject and believes profoundly in its significance, immediate or ultimate, for the enrichment of human life. He cares about his students, as thinking, feeling and growing individuals and is glad to listen to them and to talk to them in the classroom or outside the classroom. For their sakes and because of the nature of his own mind, he selects his material rigorously and orders it effectively. His presentation has always some measure of informality, of give and take. He is courteous and helpful to all but his chief concern is for the stimulation and guidance of his ablest students. He is a born teacher but he is a made teacher as well—made through friendly contacts with colleagues in his own college and elsewhere, through deliberate study of the art of teaching within his own field,

and through the resolute development of all his powers."

How high school youths themselves judge the merits and demerits of their teachers may be seen from the following report based on replies made by 13,825 juniors in the high schools of the North Central Association of Colleges and Secondary Schools. The leading items mentioned, together with the percentage of pupils making them in each case, are:

Elements of Strength (Ten Most Frequent Items)

	Per Cent
Capability or knowledge of the subject.....	18
Character	13
Fairness	12
Good nature, humor, kindness.....	10
Power to discipline.....	8
Ability to interest.....	8
Clearness	7
Willingness to help.....	7
Personality	6
Sociality	5

Elements of Weakness (Fifteen Most Frequently Mentioned)

Failure to explain and make clear.....	18
Lack of discipline.....	12
Favoritism	10
Being uninteresting and uninterested.....	8
Unfairness	8
Quick temper	8
Nervousness and lack of "pep".....	7
Overstrictness	6
Easiness	6
Lack of personality.....	4
Ignorance of subject.....	3
Lack of sympathy.....	3
Impatience	3
Sarcasm	2
Slovenliness	2

In May, 1913, C. T. Work, principal, Union Polytechnic High School, Venice, Calif., acting on orders of the board of education sent the following letter to all who were directly or indirectly interested in becoming teachers in this school. The letter reads:

To Those Who Would Teach in the Venice Union Polytechnic High School:

By way of suggestion and as a guide to future action you will permit us to mention items that we believe should characterize the men and women who undertake to assist in conducting and building up our school.

1. In the character and disposition of teachers, we believe the following indicated elements are of especial importance. Teachers should have:

High ideals of life and character.

Exemplary life habits, consistent with the highest ideals and the teaching profession, holding themselves above all suspicion and all questionable actions.

Faith, "the substance of things hoped for, the evidence of things not seen," in self, in others, in God.

Optimism in all things. Learning comes by hope and hope by a cheerful spirit; those who lack this cannot teach successfully.

Good health and energy, which should be applied primarily to the work of the school and not to outside interests that sap vitality. Personal neatness and due observance of the social proprieties in school as well as out of school.

Candor and sincerity; frankness and good nature in discussing differences with fellow workers or those in authority, when diverse opinions exist.

Loyalty to the school, to fellow teachers, to superiors in authority, to the community; faithfulness and cheerfulness in carrying out regulations, rulings and suggestions; freedom from unnecessary, unjust or malicious criticism of pupils, school, teachers, parents, officials or the community, as well as freedom from flattery, partiality, jealousy, nervousness, pettishness, pessimism and other undesirable traits.

Public spirit which feels a freedom and willingness to take part in community interests but which refrains from inexpedient and pernicious political activity; a willingness and purpose to reside in the community, thus assuring closer contact with conditions and securing the confidence that comes from acquaintanceship. Teaching is a social vocation, a community service, and not a selfish pastime.

Democratic social spirit and activity, especially as these qualities are manifest in cultivating acquaintance with parents, in entering into the social life of the school and in encouraging and directing pupils in the best social enjoyments.

Willingness to assist in all approved extra-school efforts that may be undertaken by the school, in which the services of the teachers are needed.

A self-sacrificing spirit, ready to give of self to benefit pupils and to serve the school.

Quietness and persistence in working. Patient perseverance is one of the largest assets of the successful teacher.

2. Professional ability and method require special attention and active cultivation. Among the important items in this connection are:

A definite, clear-cut, thorough and special knowledge of the subject to be taught; a definite aim and plan for each lesson.

Ambition to grow and to keep abreast of the times. The only way whereby a teacher may become and remain bigger than the work in hand is to grow as that work advances. We have no place for teachers who know everything and have nothing to learn; they must be energetic and growing; they must make use of experience, teachers' meetings and professional literature.

Adaptability to the conditions and aims of the school. A polytechnic high school, while having a wholesome regard for traditions and textbooks, must rise above them and go ahead of them. New

conditions require more frequent and perhaps more radical readjustments of the workers than do old established orders. Teachers must respond to the plans, purposes and spirit of the new order.

The spirit of cooperation with others, especially in new movements that may be undertaken for the good of the school; willingness to take part in public programs and general exercises, as opportunity and the good of the cause may demand.

Willingness to correlate work with that of other teachers and departments, and with the home life of pupils, in practical ways; ability in giving practical points to each lesson. In the application of theories to present interests is found the essence of vital thinking. Pupils should also be encouraged in outside applications, in initiative, individuality, originality.

Teaching power; ability to conduct recitations; skill in organizing and presenting work in a systematic manner, in natural relations, in simple terms and, when possible, by visual and manual means, as by outlines, diagrams, experiments, concrete examples. Most pupils are visual minded. "We learn to do by doing." Much depends upon the teacher's faculty for system, organization and realistic presentation.

Discernment in judging human nature in general and individual cases in particular, both for disciplinary and educational ends.

Tact and diplomacy in dealing with others. Human beings are not all alike, and different means and measures may be needed in handling different cases—yet all without partiality.

Constructive power in character building, through daily work and by precept and example. Character development in the pupil is a first consideration; conformity to artificial standards of learning comes second.

Power to lead pupils to work in the right spirit, to inspire them to work hard and unceasingly within reasonable limits. Example counts here.

Ability to make fits where there are misfits—in classification of pupils, in the selection of subject matter to suit classes and individual cases. The teacher must often sacrifice forms, patterns, precedent and traditions for the benefit of the pupil. This school is not a machine; it is a living, growing organism.

We believe and expect that teachers in this school should possess in large degree the good qualities indicated above, and that they will continue to develop along these lines as they do their work.

Respectfully submitted,

Supplying the Demand

Although the standards required of teachers are constantly being advanced there will always be opportunities for placement of the well prepared novices. Death inevitably thins the ranks of those who are in service; the desire to change one's calling adds to the inroads on the teacher personnel annually, while the ceaselessly expanding reaches of educational agencies of all sorts make the demand for new teachers greater and greater.

To-day according to recent reports from the U. S. Office of Education there are about 22,000 public secondary schools in the United States, enrolling approximately 4,000,000 pupils and ministered to by nearly 175,000 teachers. If we add to these figures those pertaining to the nonpublic secondary schools (the parochial, private, military and teacher training schools) the totals are impressive indeed.

The Opportunities in Junior High Schools

It is appropriate here, too, to call especial attention to the opportunities that are opening for teachers in the rapidly developing junior high schools. Formerly many of these schools did not employ college trained teachers. Such, however, is no longer the case. Consequently, university students of the right temperament and training will find in these newer units pleasant and profitable fields for the exercise of their talents.

The specific kinds of tests that the University of Michigan sets up for its teachers in training are given in the annual announcement of the school of education and need not be repeated here. It is pertinent to urge all candidates to think well about the combinations of subjects that they expect to offer as majors and minors when they come to apply for teaching positions. Rarely can the beginning teacher hope to be assigned to a teaching place in which he will teach in only one field of learning. The likelihood is that he will be asked to offer courses in two or even three lines of instruction. Experience shows that there are usually more teachers of English and history available than there are places to be filled. On the other hand there are often not enough candidates for most of the newer subjects, such as commercial courses, auditorium direction, speech, art, music, manual training and physical education, coupled with one or more academic teaching subjects. Further, there are certain combinations of subjects that are not the wisest. Among these are two modern languages without a good background of Latin or some other major subject to balance the program; sociology and economics, without adequate training in the foundational subject, history; psychology and education, without the training needed in some more common high school teaching subject; and, as suggested, athletic coaching without training that will permit also the teaching of an academic major or minor.

The rewards of the teaching profession are therefore varied, compelling and satisfying for those who are equipped by nature and training to attain them. Persons not so equipped can scarcely expect to realize them and should not make the futile effort to do so.

Recent Books That Deal With School Superintendents' Problems

This brief review of recent literature on state school administration indicates that the field is marked by rapid expansion

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IN 1910 the literature of state school administration as we know it to-day was nonexistent. There were available only a few scattered articles dealing with special phases of the subject, a body of statistics accumulated in the annual reports of the U. S. Commissioner of Education, the reports of the chief state school officers, chiefly statistical and primarily local in interest, and a few scattered pioneer studies, forerunners of the modern objective type.

In 1910 the first general textbooks on state school administration¹ were yet seventeen years in the future. Swift was preparing his basic study of state permanent school funds,² and Cubberley's pioneer analysis of methods used in the apportionment of school funds³ was only five years old. The latter author's championship of a larger unit of school administration was yet largely in the future and his classic *Osceola School Code*⁴ was not to appear for eleven years.

Some Early Studies

The most important study of the rural school administrative situation was to be found in a publication of the U. S. Department of Agriculture.⁵ In the field of certification, Cubberley's study⁶ for the National Society for the Study of Education had just appeared and Updegraff was preparing a basic summary of certification regulations for the U. S. Office of Education.⁷ The present extensive literature on state teacher retirement systems was unknown, although the National Education Association passed resolutions on this topic as early as 1891. So one might examine in turn the literature of each of the other branches of state school administration and find that practically all of the recognized material in this field postdates the year 1910.

The purpose of this article is to name and to describe briefly some of the major contributions

to the literature on state school administration that have been published from 1926 through 1930. In order to do so conveniently it is necessary to classify the material to be reviewed, under six groups: (1) general works; (2) state school finance; (3) state control of teachers' salaries, tenure, retirement and certification; (4) organization of state departments of education; (5) state control of textbooks, and (6) state legislation creating local administrative units. It is recognized that many important problems are not covered in the foregoing list. State relationships to school buildings, to the preparation of teachers, to child labor and to higher education are other important phases of state school administration that might have been included. However, the connection between the state educational department and these fields is usually less direct. Furthermore, the limitations of a brief article must justify many omissions. For these reasons attention will be concentrated on the six fields listed. As a further necessary limit to the scope of the article, material published in periodicals is excluded from consideration as are studies limited in scope to one particular state. As a general rule, also, only books that are wholly devoted to the topic under consideration have been included.⁸

Government Publishes Valuable Data

There is a growing demand for accurate information concerning state school problems and practices. In particular, there is need for reliable and up-to-date information concerning state school statistics and school legislation. For statistical information about state educational administration the most complete single source is the biennial compilation published by the U. S. Office of Education.⁹ Information concerning state school legislation is available in two groups of publications. The research division of the National Education

Association publishes in December of each year a brief digest of the important legislation enacted during that year.¹⁰ The U. S. Office of Education publishes a more comprehensive survey of legislation affecting schools every two years.¹¹

The growing interest in state school administration is reflected in the publication of two general textbooks. Cook's "Federal and State School Administration" appeared in 1927 as did Cubberley's "State School Administration." Both of these books are designed primarily for class work although they are also useful as reference volumes. Cook's treatment is the briefer of the two and covers a narrower range of topics. Both volumes deal also with Federal educational relations, the former devoting a larger proportion of space to this topic than the latter.

Another important group of general works are the state school surveys. It is outside the scope of this article to list these, but they nevertheless constitute a valuable element in the literature of state school administration. The outstanding recommendations of these surveys have been classified and brought together in usable form in a recent research bulletin of the National Education Association.¹²

Studying State School Finances

The most comprehensive recent collection of facts about state school finance is that prepared by Swift and Zimmerman and published by the U. S. Office of Education.¹³ This study shows for each of the forty-eight states what taxes are levied for schools, in what funds these taxes are placed, and how these funds are apportioned to the local districts. It does not include Federal funds, local taxes or taxes for higher education; otherwise it is a complete compendium of state school finance as organized in the United States in 1926. A general treatise on state and Federal policies in school finance will be published in the near future.¹⁴

Turning to more specialized studies in state school finance, it is useful to note two major fields, revenue and apportionment. A major contribution in the former field is that of Morrison, whose "School Revenue" was published in 1930. This book emphasizes the position of the school as an organic part of the state's fiscal problem and points out the relationship of school support to the total economic situation. The central thesis of the study is stated thus: "Particularly in a democracy, in which both school attendance and the means of supporting schools are primarily economic in import, the development of schools is determined by the existing economic conditions and, in turn, prosperity in the economic sense is

intimately tied up with the effectiveness of the school system."¹⁵

A much briefer study of the school revenue question was published in 1930 by the National Education Association.¹⁶ This discusses the various types of taxes and comments on the need for new methods of taxation. This study is the first of a series now in preparation, which will present the salient aspects of taxation with special reference to the support of public education.

In the field of apportionment the recent writings of Mort are important. His views of the basic principles governing the apportionment of state school funds and the technique for applying such principles are given in his "State Support for Public Schools."¹⁷ Mort's central thesis may be summarized in the statement that a minimum educational offering should be available to every child in the state and that the system of state aid should make the provision of this offering possible without an unreasonable tax levy in any district. The techniques devised for accomplishing this objective have been applied to the financing of schools in a number of states.

A few special studies closely related to the problems of financial ability to support education and state aid should be mentioned. Norton's study of the financial ability of the states to support education shows that some states are five or six times as able to meet their educational obligations as others.¹⁸ Baldwin has summarized the provisions of the several states governing financial aid to rural schools.¹⁹ Burns,²⁰ Johns²¹ and Harry²² have proposed refinements in equalization procedures to allow for the cost of transportation and for variations in the cost of living. Neulen has studied the effect of state aid for special projects in the schools and has reached the conclusion that such special subsidies are relatively ineffective.²³ Yakel has studied state legal control of public school financial administration and has proposed a series of principles to guide state legislation in this field.²⁴

Teacher Personnel Problems

In reviewing the literature on state teacher personnel problems attention will be directed to recent contributions on those aspects of state school administration and legislation that directly affect the teacher: state salary schedules, tenure, retirement and certification. The most recent and comprehensive study of state salary regulation is that published in 1929 by the Illinois State Teachers' Association.²⁵ Such a study was badly needed since no other had been reported for more than twenty years.

The administration of teacher tenure has been

discussed by two reports of the tenure committee of one hundred of the National Education Association. The last two reports, 1926 and 1928, develop fundamental principles of tenure legislation, review recent literature in the field and quote opinions of educators and others on important issues.²⁶ Two important special studies in this field have been published by Teachers College, Columbia University. In 1927 appeared Anderson's study of the legal phases of the teacher's status from which a statement of the optimum legal position was derived.²⁷ The following year a study of judicial decisions bearing on teachers' contracts appeared.²⁸ This study emphasized that teachers employed in states with tenure laws may be removed from office for good cause and in the manner prescribed by the statutes.

What Studies Show on Retirement Systems

In the field of retirement, the outstanding publications are those of the National Education Association, the National Council of Teachers' Retirement Systems and the Carnegie Foundation for the Advancement of Teaching.

The Carnegie Foundation has for years given attention to the problems of teacher retirement. The twenty-second and twenty-fourth annual reports of the president and of the treasurer of the foundation, in particular, contain much valuable material.²⁹ A special bulletin on the social philosophy of pensions was published in 1930.³⁰ This reviews the social and economic principles basic to sound pension systems and examines a number of existing pension systems in the light of these principles. In particular, the bulletin favors joint contributory retirement systems rather than those in which the total cost is met from public funds.

The National Council of Teachers' Retirement Systems is an organization of the officers of existing teacher retirement systems, local and state. Annual meetings are held in February. The published proceedings deal with a wide range of practical and theoretical problems connected with the operation of retirement systems.³¹

The National Education Association, through its committees on retirement allowances and the research division, has published a series of important reports in this field. These are first published in limited editions as committee reports and then revised and republished as research bulletins of the association. Three such bulletins have appeared within the period covered by this article.³² These deal with the fundamental principles of retirement systems, analyses of retirement laws and reports of new or proposed retirement legislation.

Another important publication in this field that

falls within the period covered by this article is Palmer's "Pension Systems for Public School Teachers."³³ This is primarily a historical investigation of growth trends in retirement systems and of criteria to be used in evaluating them.

Few comprehensive studies of teacher certification have appeared recently, although there have been a number of statewide investigations of the subject. The most thorough study of the status of certification in the United States is that published as a bulletin by the Federal Office of Education.³⁴ This study shows in detail the names and the validity of, and the requirements for, teaching certificates in the various states. Unfortunately it is now somewhat out of date, especially in view of the rapid changes that are occurring in certification practice. The study has been brought more nearly up to date in a few respects by Cocking and Peyton.³⁵

The research division of the National Education Association has prepared a study of staffs and of salaries paid in state departments of education in 1930. This was published early in 1931. Several major studies have been reported in this field since 1926. Schrammel investigated relationships between school efficiency and state department organization and staff.³⁶ His investigation showed the advantages of a professional staff under the leadership of a state superintendent appointed by an elected state board of education.

Conditions Five Years Ago

More recently published but with older data is a study by Li which undertakes to summarize American experience in state school organization with a view to applying our experience to the organization of public education in China.³⁷ The studies by Li and Schrammel supplement each other and taken together give an excellent summary of the status of state educational organization five years ago. A recent questionnaire investigation by Sheffer brings certain data concerning the state superintendent and the state board of education down to 1928.³⁸ Closely related to these investigations is a study reported in 1927 by Counts.³⁹ This is concerned with the social composition of city, county, institutional and state boards of education. The study includes thirty-nine state boards and presents data on such items as the term, tenure, age, sex, education and occupation of the members.

A study of state school reports, a special phase of the organization of state departments of education, was published at the beginning of the period under review.⁴⁰

Laws relating to free textbooks and to the adoption of texts have recently been compactly sum-

marized by Keesecker.⁴¹ His study shows that twenty-one states and the District of Columbia require that textbooks be provided at public expense and that twenty-five states have state adoption.

Three studies of various aspects of state textbook control, which have been made for single states, are of sufficient general importance to demand mention. The problem of state publication of textbooks in California has been carefully examined by Davis.⁴² His conclusions are decidedly adverse to the advocates of state publication. Tidwell has published a study of state control of textbooks with a special reference to Florida.⁴³ He reviews state practice, develops criteria and proposes a state textbook law. State publication of textbooks has long been a live issue in Mississippi. A committee of the state education association has published a substantial report on this issue, making recommendations against state printing.⁴⁴

The administration of local school systems is generally delegated by the state to the local unit of control. The actual size and nature of this unit are, however, clearly a problem relevant to state school administration. The two units most commonly suggested for local school administration are the county and the community. The former has occupied the center of attention in recent years as far as the literature of state school administration is concerned. The U. S. Office of Education has published a bibliography of 108 titles on the subject⁴⁵ and the H. W. Wilson Company has announced a volume on this topic in their "Reference Shelf Series."⁴⁶ Most of the recent books on rural education also deal with the subject.⁴⁷ In addition to these general studies Tink has studied the county unit with special reference to Florida using, however, comparative data from three other states.⁴⁸

This brief review of the recent literature on state school administration points clearly to the conclusion that this is a field marked by rapid expansion. The near future will doubtless witness further advances as the literature of the subject keeps pace with the growing professionalization of the administration of state school systems. Here is a relatively new field of professional educational service that will increasingly demand leadership of the highest type.

Some Unsolved Problems

Problems, difficult and interesting, await exploration. How can state school efficiency be measured? What is the function of research in state school administration? What relationships between state and local school officials are most practical in operation, sound in theory and effective in

results? How can the diverse educational interests of a state be coordinated into a single program? How should this program, in turn, be related to other phases of state government? How can the preparation and placement of teachers in the public schools be administered so as to ensure enough high grade teachers, without wasting time and money in preparing more than are needed? How can the various types of private educational enterprise be effectively coordinated with each other and with the public schools? What relation shall the states bear to the Government in the educational field?

These are problems that call for the utmost in professional scholarship, skill and insight. The writings reviewed have made significant contributions to their solution. We may expect that in the future the literature of state school administration will deal with such problems as these.

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humdrum process of taxation one may get much the same results as by the dramatic methods of revolution. Visitors to Soviet Russia are particularly stirred by the sight of former palaces of the czars and the high nobility now turned into hospitals, rest homes and clubhouses for the working class.

"A similar case, minus revolution, is Impington Hall, the sixteenth century Cambridgeshire home of the Pepys family, figuring in the celebrated diary of the seventeenth century Samuel. Postwar taxation has made this historic house, like so many others of the stately homes of England, too expensive to live in. Impington Hall having come on the market, it has been purchased and presented to the county education authorities as a 'village college' for the population of the vicinity.

"In the United States taxation has been extremely busy of late in providing the people with palaces of education, except that here we do not buy up and convert ancient manor houses, but build new, magnificent schools. The countryside has been blossoming with million dollar high schools, which are as significant for America as its skyscrapers."

A University Personnel Bureau and What It Is Doing

The general notion that college students devote more time to drinking and unnecessary frivolities than to their college work is attributed more to talk than to fact, says Dr. Henry Beaumont, executive secretary, personnel bureau, University of Kentucky, who is in close touch with the students.

The contacts that have been established by Doctor Beaumont through the personnel bureau have enabled him to understand and solve many problems of present day college students.

The personnel work as conducted by Doctor Beaumont consists of vocational guidance activities, such as establishing contacts with nationally known firms and corporations, seeking graduates of the university who wish to enter the business world, and the analysis of the interests of the students in order to assist them in the selection of the correct field in which their life work will center.

"How and under what conditions to study" is another of the problems with which Doctor Beaumont has to deal, and he not only advises students as to their methods of study, but devises simplified methods whereby their work may be made easier.

The personnel bureau is in fact a mental dispensary, where the personal, financial and educational problems of the students may be taken.

Pepys Home in England Is Now a "Village College"

Conversion of the home of the Pepys family, Cambridgeshire, England, into a "village college" has brought forth the following comment by the *New York Times*:

"From England, the land of rule of thumb and little by little, comes one more instance of a truth that is beginning to win wide acceptance. By the

Modernizing Educational Methods Through Radio Instruction

The extent to which sound systems and radio are serving the schools is emphasized in this article which also describes a number of effective installations

By H. G. CISIN, M.E., New York City

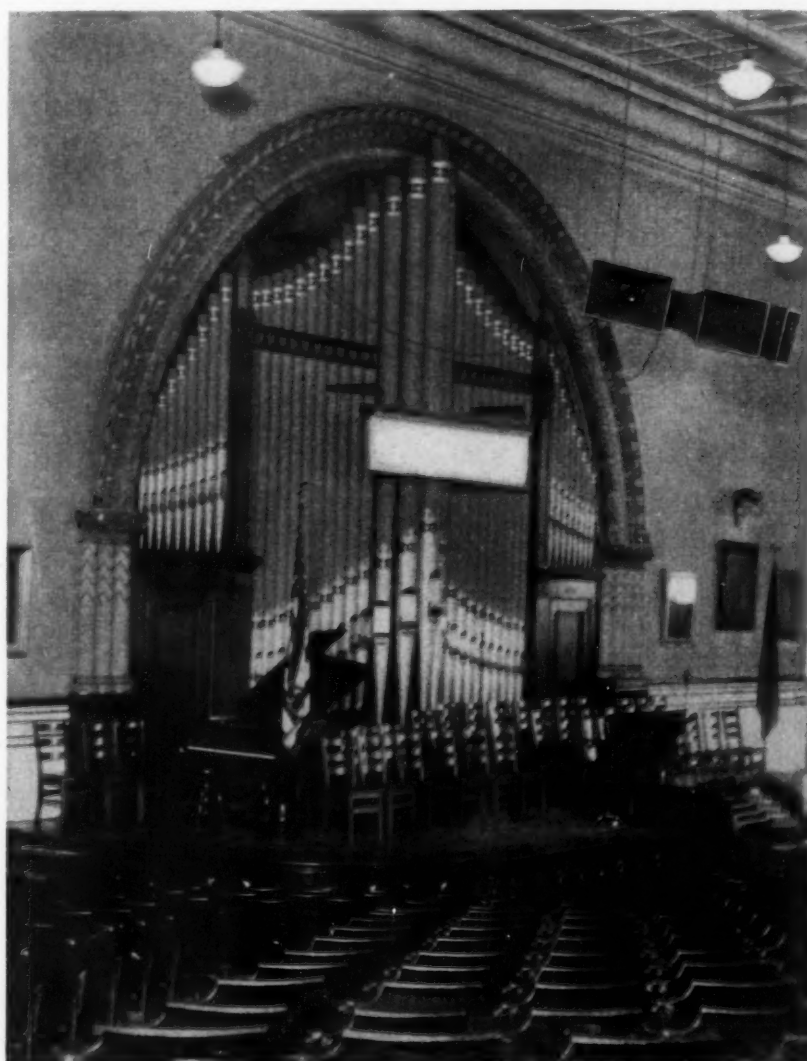
IT IS difficult to realize the vast extent to which radio and sound systems have been applied in educational work. The possibilities of radio in this field were investigated by a special committee of noted educators appointed in 1929 by the Secretary of the Interior. Many interesting facts were disclosed as a result of this survey.

It was found that out of the 627 licensed broadcasting stations in the United States, seventy-seven (12.3 per cent) were owned and operated by educational institutions. Questionnaires sent to 2,000 school superintendents in cities of 2,500 or more revealed the fact that one-third reported the installation of radio equipment in 1,690 school buildings. Fifty-three educational stations reported a weekly average of eight hours on the air, while

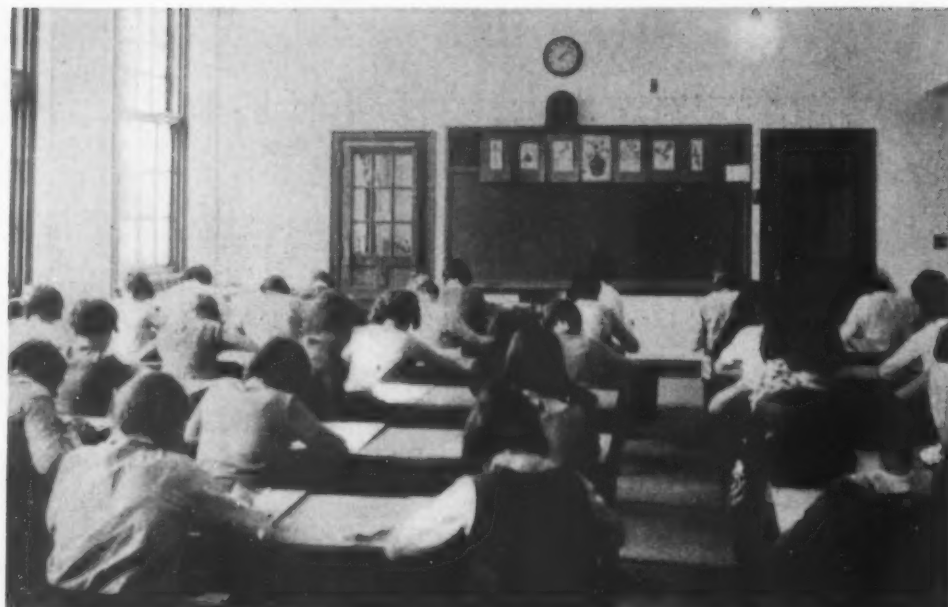
280 commercial stations reported a weekly average of seven and a half hours devoted to educational broadcasting. About 80 colleges, without stations, were broadcasting educationally.

Sixty nonacademic, noncommercial organiza-

tions of national scope, including three Federal departments, reported a repeated use of the radio for instructional purposes. The report of the committee also pointed out the following pertinent facts: The Damrosch Music Appreciation Hour course in music is said to be reaching 150,000 schools; the Columbia Broadcasting System began on February 4, 1930, an educational program in history, literature, music and art, prepared under a corps of experts headed by Dr. William Chandler Bagley, Columbia University; Ohio maintains an organ-



Dynamic reproducers have been installed in the assembly hall of Central High School, Philadelphia.



Speakers have been installed in the classrooms of the Upper Darby Junior High School, Upper Darby, Pa., shown in the illustration at the left. The lower picture shows the central control plant of Washington Junior High School, Duluth, Minn.

ized program of school work for one hour every school day, supported by the state legislature, which has appropriated \$20,000 a year for a two-hour period. The superintendent of public instruction for South Dakota reports that the educational forces of the state are organized and ready to start a state program.

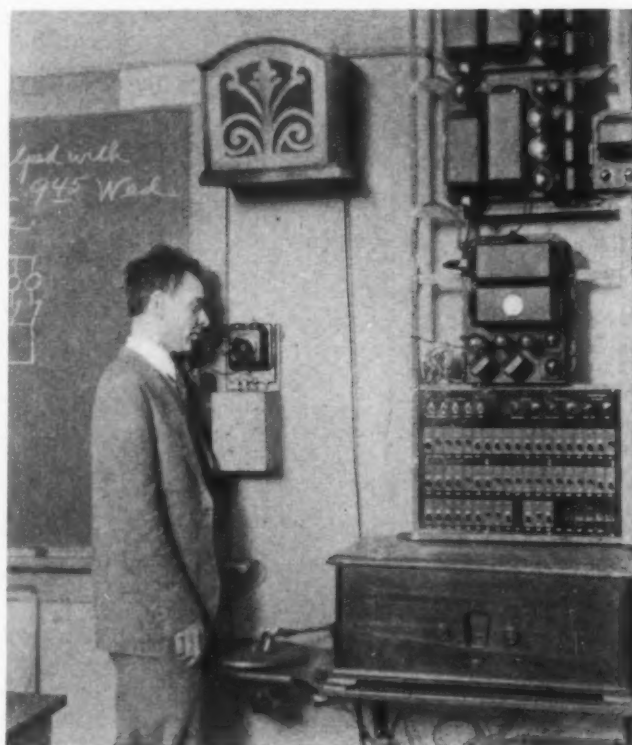
As an example of the widespread use of radio in schools, the city of Nashville, Tenn., reports all schools equipped with radio sets, while Cincinnati has a school board order requiring all new schools to be completely wired for radio and sound systems.

Conspicuous instances of educational work by radio, in addition to those already outlined, include the California School of the Air, the National Youth Radio Conference and the lectures of prominent men and noted educators such as Joseph R. Lunt (chemistry), Thornton W. Burgess (nature lore), Ernst R. Clark (travel), H. V. Kaltenborn (current events), Dr. S. Parkes Cadman (religion), Frederic W. Wile (current events), David Lawrence (current events), Rear Admiral Richard E. Byrd (geography) and Commander Donald Macmillan (geography).

In an article of this nature, it is possible to give only a sketchy outline of the importance of radio in education. Among the subjects that have been taught through this new medium are civics, art, poetry, geography, geology, current events, history, biography, drama, literature, health and hygiene, travel, calisthenics, games, agriculture, chemistry, languages, arithmetic, music, international affairs, architecture, nature study and aeronautics. The introduction of television will make it possible to add many new subjects that can be taught in this way.

A sound amplifying system is needed in the

school, in addition to the radio receiver, first to give the required amplification and second to permit any or all classes to listen to any broadcast program. The use of an electric phonograph permits the most modern methods of instruction in languages, in music appreciation and in similar courses. The microphone in the principal's office enables him to address some particular class or all classes at once, without the necessity of assembling the pupils in the auditorium. When a special event is being staged in the auditorium, the microphone there allows the program to be heard at other points in the building, so that it is possible for pupils not in the auditorium to hear the



program from their classrooms. Incidentally, sound amplifying and distribution systems provide the most rapid and efficient method of conducting fire drills. These features give a general conception of the uses of sound systems in schools. More specific information may be obtained from the descriptions of particularly interesting and noteworthy installations.

A fortunate feature of the school radio and sound system is the fact that it can be installed by degrees, in comparatively inexpensive units. This flexibility permits schools with limited funds

size of the school, the number of classrooms, the type of auditorium and other particular requirements. In general, however, it would consist of one or more power amplifiers, together with the necessary control switches and meters. The amplifiers are fed from three sources—a radio tuner, an electric phonograph or microphones. Loud speakers are placed in classrooms, auditoriums, gymnasiums, cafeterias, playgrounds, halls and on athletic fields. Selective switching permits the programs to be reproduced at any or all points.

The installation at the Washington Junior High



Reproducers have been installed on each side of the stage in Riverside High School, Milwaukee.

to install a small system, adding to it from time to time, without the necessity of discarding any of the original equipment. For example, an inexpensive installation incorporates a radio tuner, an amplifier, a microphone and microphone amplifier and a few dynamic reproducers. More speakers can be added whenever possible and then, if necessary, an additional amplifier may be installed. The radio and microphone may be supplemented at any time by an electric phonograph. Of course if financial considerations are relatively not so important, it is a more desirable plan to equip the school with a complete and carefully engineered sound system.

Such a system would naturally vary with the

School, Duluth, Minn., is a typical one. This sound system includes a complete double channel radio, phonograph and public address system. A master panel in the school's electrical shop carries two separate power amplifiers. These are two-stage units, utilizing single tubes in the first stage and 150-type power amplifiers in push-pull in the output stage. The same panel also carries a microphone amplifier, two impedance adjusting transformers, volume monitors and about sixty-five switches that control the equipment and the programs to the various rooms. Three microphones are used, one in the principal's office, one in the auditorium and one at the control panel for making announcements. A special radio tuner is

used for radio reception, while an electric turntable with an electromagnetic pickup is employed for reproducing phonograph records.

The sound distribution system is so arranged that two entirely different programs may be sent out to different groups of rooms at the same time. Announcements regarding either program may be made over the microphone. Fifty classrooms and shops are arranged for connection to magnetic-type speakers. In the auditorium, which seats about 1,500 persons, a dynamic reproducer is installed. A similar reproducer is also used in the gymnasium. Six miles of wire connect the loud speakers in the various rooms to the central control panel. Lead shielded multiple conductor telephone cable is used for the wiring and as a result the system is entirely free from cross talk. Shielded microphone leads are used to avoid noise pickup. On the roof of the school, a 200-foot antenna has been erected on 20-foot steel masts. This installation permits the reception of broadcasting stations in Minneapolis, Chicago and even Cleveland and Cincinnati in the daytime, if conditions are at all favorable.

The first successful school sound installation in Philadelphia was in the Central High School. The accompanying illustration shows the method used in this school to mount the dynamic reproducers in the large assembly hall. The four speakers are suspended from the ceiling, high above the stage and give exceptionally successful results. The Central High School uses the sound system for bringing radio programs of educational interest to the pupils and for instruction in public speaking. Phonograph records are also reproduced for entertainment purposes. The amplifier unit is in a special room back of the stage. A standard amplifier is used, with 150-type tubes in push-pull in the output. The microphone amplifier and the radio tuner are on the same panel with the amplifier. The electric phonograph turntable is mounted on a convenient shelf attached to the panel. Although this system is used only in the auditorium at the present time, plans are under way to extend it to the rest of the school.

Effective Installation in New School

The Upper Darby Junior High School, Upper Darby, Pa., is equipped with an interesting and effective radio and sound amplifying system. Incidentally, this was the first school in the suburbs of Philadelphia to boast a modern sound installation. A powerful single-channel amplifier is used, capable of supplying sixty speakers. The system is complete in every respect, allowing the interchangeable use of phonograph, microphone or radio. Fifty-four speakers have been installed

in the classrooms and shops. A typical classroom is illustrated. The loud speaker may be seen directly below the clock. Speakers are similarly placed in the shops. In the auditorium two dynamic reproducers are used. They are mounted on the front auditorium walls.

This system was tested by Dr. Josiah H. Penniman, provost, University of Pennsylvania, during the formal opening and dedication of the school and it is considered to be a model of satisfactory service and efficiency.

The Riverside High School, Milwaukee, is equipped with a radio and sound amplification system operating fifty-five magnetic speakers and four dynamic reproducers. The illustration shows how two dynamic speakers are used in the auditorium. The speakers are mounted in ornamental cabinets and placed on each side of the stage.

The speech amplification system installed in the Schaaf Junior High School, Cleveland, employs twenty-seven speakers. The Cretin High School, St. Paul, Minn., uses dynamic reproducers in the combined auditorium and gymnasium.

The Sacramento High School, Sacramento, Calif., utilizes sound amplification in a unique manner. The school, with an enrollment of more than 3,000 pupils formerly held assembly three times each week, in order to take care of the entire student body. Recently four dynamic reproducers with horns were installed in the athletic field and now a single meeting takes care of the weekly assembly.

Religion No Cause for Teacher's Dismissal in Nebraska

In response to an inquiry, the attorney general of Nebraska, C. A. Sorensen, has advised that a school board may not legally dismiss a teacher on account of her religion. But, he ruled, it is under no legal obligation to employ or reemploy a teacher unsatisfactory "because of her religion or any other reason or no reason."

Even though the teacher's contract might provide in broad terms that the board could dismiss a teacher at any time with or without cause, Mr. Sorensen held that "if the teacher could show that her religion induced her dismissal, she would be entitled to the relief authorized by law for wrongful discharge from employment."

"A public school teacher," he explained, "cannot by word, sign, act or garb consciously or unconsciously impart her religious creed to the pupils. The teacher in the public schools of Nebraska is under an affirmative legal duty to refrain from imparting her religion to her pupils."

A New School Within Old Walls

In the space of three months after the high school building at Puyallup, Wash., had burned, a modern structure had risen and school was continued without any loss of time

By HILL, MOCK & MORRISON, Architects, Tacoma, Wash.

THE Puyallup High School building, Puyallup, Wash., was erected in 1927-28 to replace an older building that had burned. The fire, which occurred on May 10, 1927, completely gutted the old structure and placed the district under the necessity of erecting a new building before resuming school.

Fortunately, the building and its contents were fully insured. Fortunately, also, the district had a complete and up-to-date inventory and appraisal of the building and its contents, which had been prepared by professional appraisers and made possible a quick and satisfactory adjustment with the insurance companies so that reconstruction work could be started almost at once.

The old building had been badly overcrowded and was not well adapted for operating the separate senior and junior high schools which the district had maintained in it for several years. Consequently, while the fire caused a material increase in the financial burden of the district, out of it has come a decided improvement in housing facilities for pupils.

The district embraces Puyallup, a town of about 7,200 population, situated ten miles southeast of Tacoma, and contiguous territory, with a population of approximately 10,000.

The task that confronted the board was the



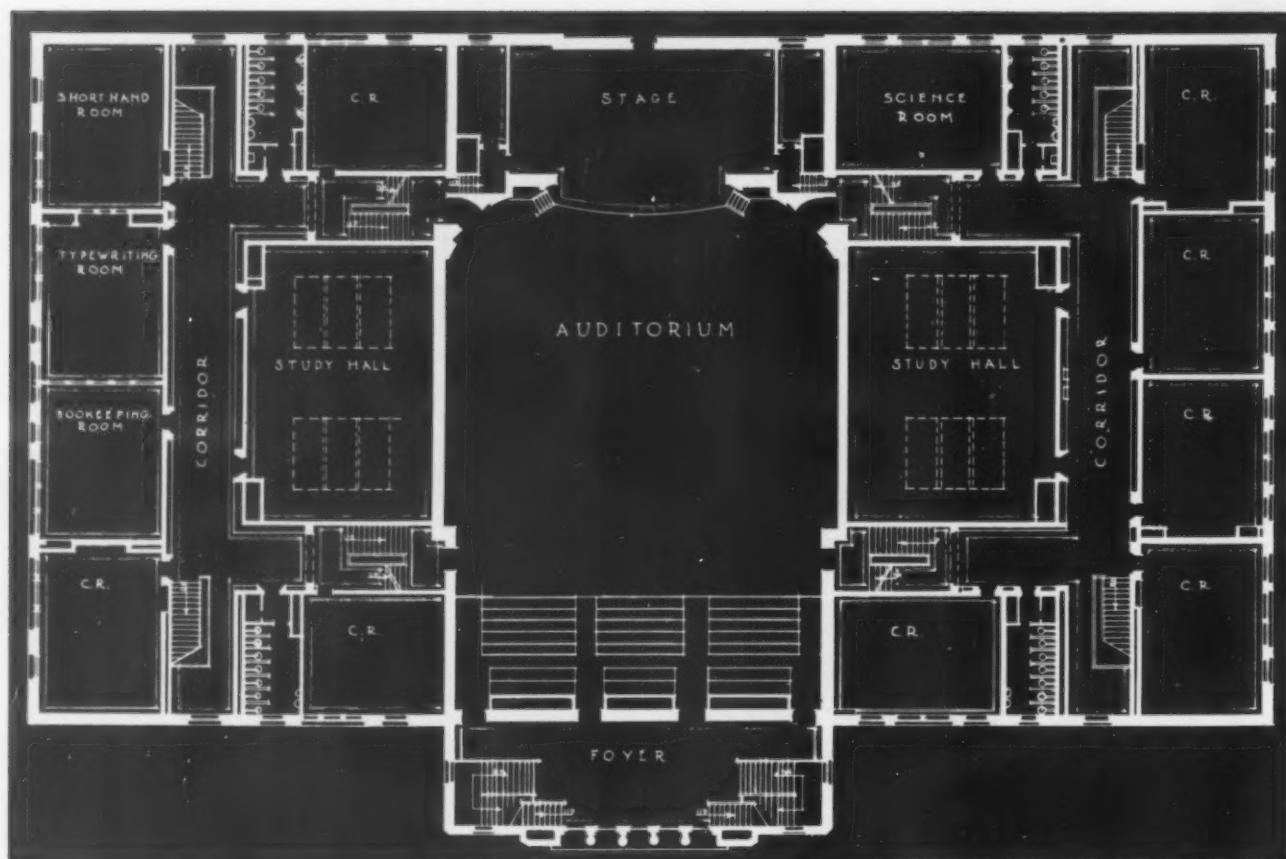
construction of a new building within three months, upon a site satisfactory enough in itself but encumbered by the smoke stained and desolate-looking masonry skeleton of the old building.

The old building was of Colonial design and of "ordinary masonry" construction. The outside walls were of common brick, the floor and corridor partitions on the ground floor were of concrete, and all other partitions and floors were of wood construction.

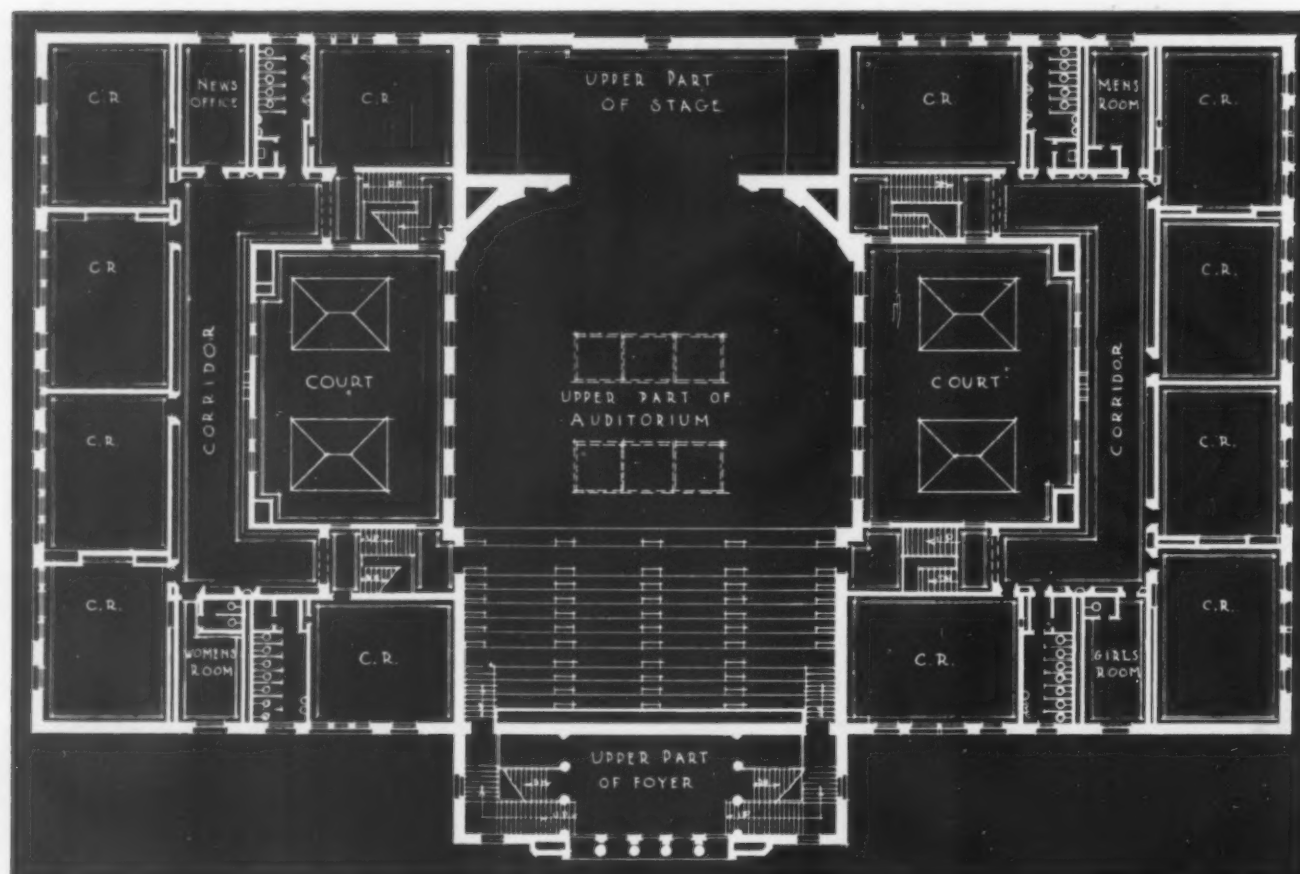
The fire destroyed the interior wood construction of the building, but left the masonry walls standing except for some parts of the top portion of the brick work which fell when the roof frame collapsed.

The original building was built in 1909 and enlarged in 1919, and the rear wall of the original part still stood, dividing the space into two parts.

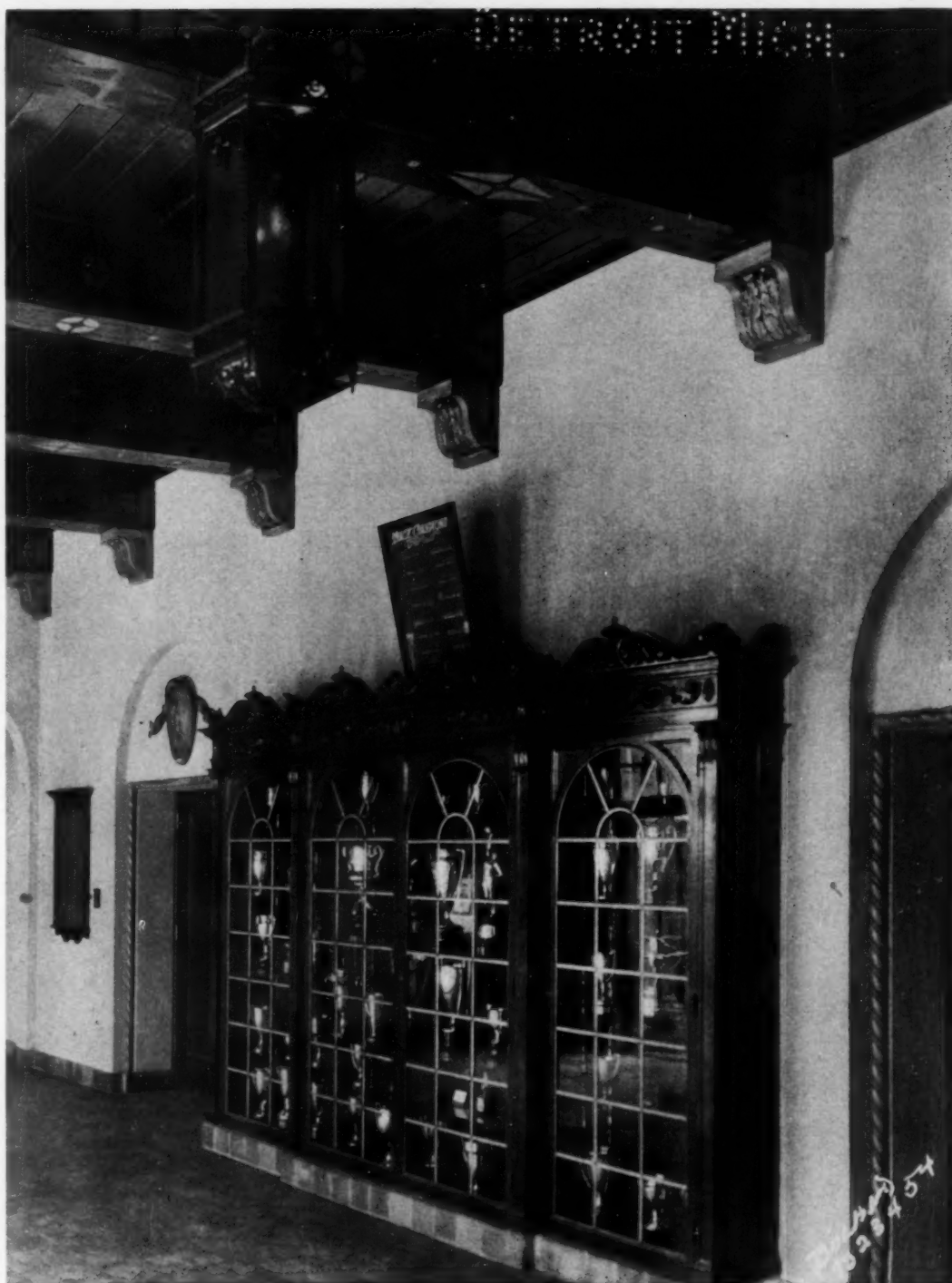
These walls appeared at first glance to be unsuitable for further use because of their apparent damage by fire and because the district required a building quite different in plan from the old one. However, after making a careful survey of their condition and preparing several plan studies of the new building, the architects concluded that the damage was largely superficial and could be easily repaired. Minor structural changes, such as the regrouping of window openings by removing certain brick piers and substituting steel



Plans of the first and second floors show the four main units of the new building—the senior high school on the right, the junior high school on the left and the auditorium and foyer units in the center.



The lobby of new construction, and opening directly into the auditorium unit, creates a favorable impression on both visitors and pupils. Here we see a section of the beamed ceiling, the ornamental lights and the cabinet for trophies won by the pupils.



columns, made it possible to adapt the existing frame to a compact and economical plan. Since its use meant a saving of several thousand dollars and at least a month's time in the demolition of old walls and the erection of new ones, the board promptly decided that that was the sensible plan to follow.

A competent and reliable local contractor was employed on a cost plus percentage basis and the construction of the first unit of the building was begun at once.

By this procedure the delay that would have been necessary in preparing plans and specifica-

tions and in obtaining bids was eliminated. The main lines of the unit were fixed, of course, by the existing walls. Prints were made of the architects' preliminary sketches and the required structural data were noted on them. The unit was almost ready to roof by the time the working drawings were completed, and it was ready for occupancy on the day on which school opened, September 1.

This unit provided a sufficient amount of classroom space under an arrangement by which junior high school classes were conducted in the forenoon and those of the senior high school in the



Stucco was chosen for the exterior treatment. A view of the gymnasium, below, shows how the walls of the old building have been employed in the new structure.

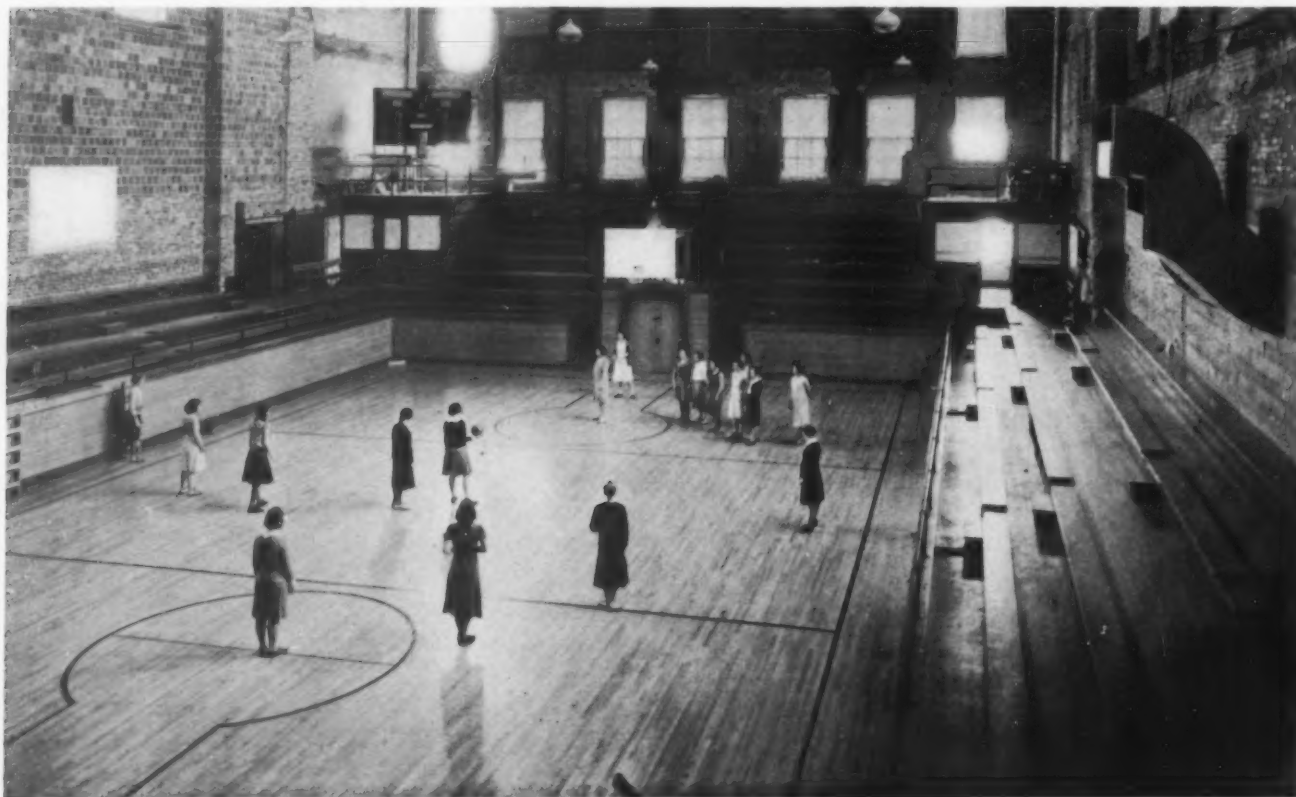
afternoon. In this way both schools were able to carry on until the second unit, which was new construction, was completed, and ready to be put into service.

Facilities Provided in Senior High School

The new building is divided by masonry fire walls into four units. On the north or left side is the senior high school unit. This was the first unit to be completed. It contains ten classrooms, chemistry and physics laboratories, shorthand,

typewriting and bookkeeping rooms, a study hall that seats 135 pupils, the principal's offices, the fan and storage rooms and the boys' locker and shower rooms. It was built within the walls of the original building.

The gymnasium and auditorium unit lies in the center of the completed building and occupies the space that was the addition to the old building. The auditorium, which is not yet finished, will be above the gymnasium. The gymnasium floor is 50 feet by 80 feet, with bleachers on all sides having



a capacity of about 900 seats. The lowest row of seats is at the ground floor level of the old building, while the playing floor is 4 feet below this level and has a clear height of 20 feet under the auditorium floor girders. The auditorium will seat 1,500 persons and will have a completely equipped stage 24 feet deep.

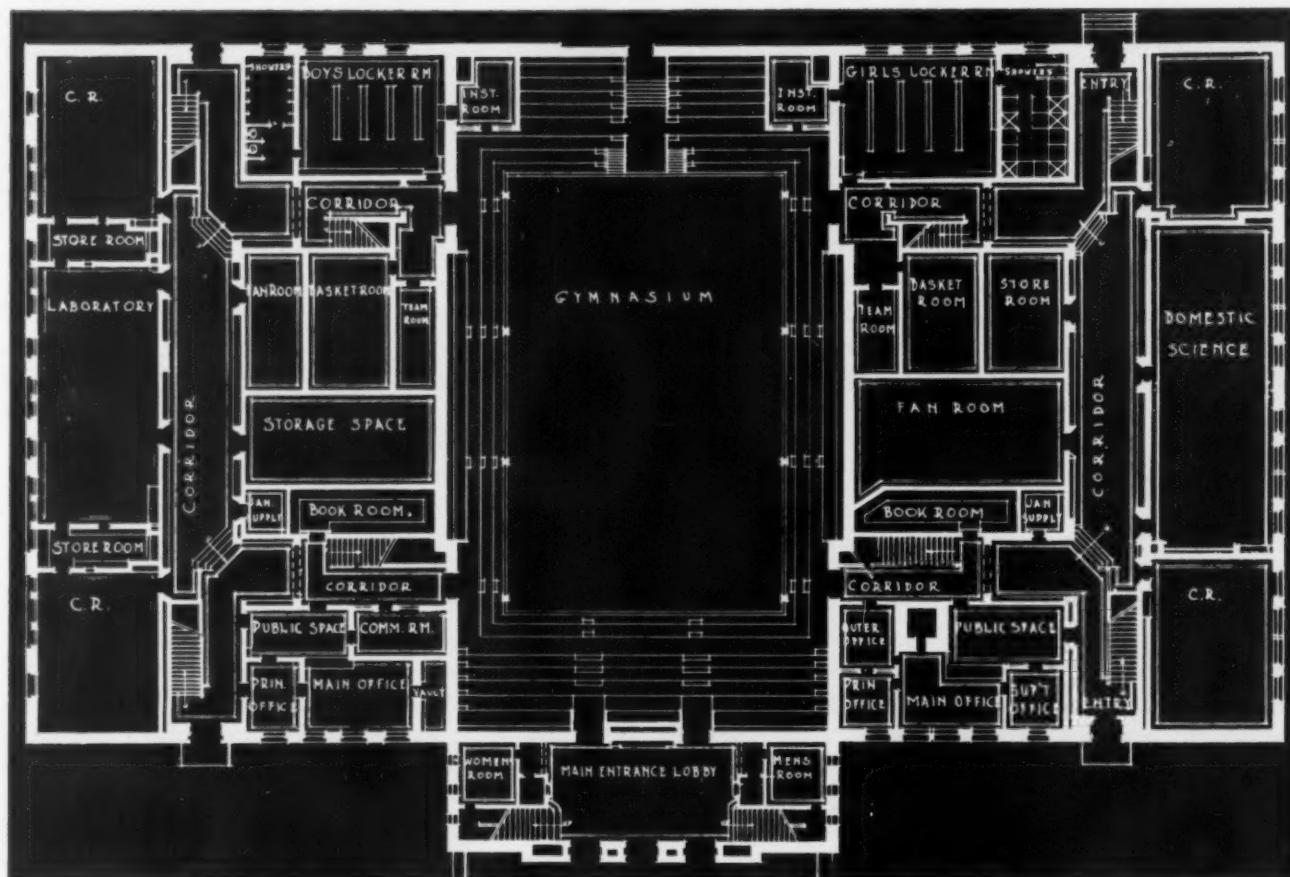
The lobby and stair unit is of new construction and lies in front (west) of the auditorium unit.

The junior high school unit is of new construction and lies to the right or south of the audi-

practice will be necessary when the enrollment reaches the capacity of the building.

Since the manual arts and home economics departments are housed in separate buildings that were not destroyed by the fire, no provision for them was necessary.

The classroom units are of ordinary masonry construction, while the auditorium, gymnasium and lobby units are of mill or slow burning construction. The floor and balcony girders and the roof trusses are of steel. Stucco was chosen for



The gymnasium is on the ground floor, and is separate from yet accessible to both the senior and the junior high schools.

torium unit. It is similar in size and arrangement to the senior high unit, and contains thirteen standard classrooms, one physics laboratory, one sewing room, a study hall, a girls' locker and shower rooms, the principal's office and the superintendent's office.

By this arrangement of the units, the two schools are separated, yet each school adjoins and has the use of the gymnasium and auditorium. Since the auditorium of the average school is in use only a small part of the time, no inconvenience is anticipated on this account, and each school has available a much larger auditorium than the board would have felt justified in building if the schools had been housed in separate buildings. An additional gymnasium floor for class work and

the exterior treatment as being the most economical means of covering the fire scars and structural changes in the old walls. The channeled treatment of the lower walls was an inheritance from the old walls. The entrances and ornamental coping are of terra cotta. The sloping roof of the auditorium is of tile, while all the flat roofs are of five-ply felt and asphalt.

The heating system is an unusual combination of three different types of systems. The old building contained two fans and a considerable amount of cast iron radiation, which were not seriously damaged by the fire. These were reconditioned and used in the new work.

The first or senior high school unit has a "split" system, using the old direct radiators in the rooms

and, for the ventilation system, one of the old fans. The auditorium-gymnasium unit has a plenum system that uses the other fan and is arranged to supply either room, but not both rooms at once. The new or junior high unit is heated and ventilated by separate ventilating units in the rooms, with direct radiation in the offices. The toilets of each unit are ventilated by separate pull-out fans.

The boiler plant is in a detached building, and supplies all of the buildings on the property. It consists of two low pressure steel boilers with oil burning equipment.

The pupil capacity of the new building is approximately 1,400, and its volume in cubic feet is 1,614,231. Its cost, including the estimated cost of completing the auditorium, will be \$178,616. This makes a cost of \$199 per pupil, and of 17¼ cents per cubic foot. These costs include an electric clock system with program bells, an intercommunicating telephone system, a fire alarm system, all lighting fixtures, window shades and other attached equipment. Particular attention was paid to the artificial illumination of the classrooms and study halls, and the minimum light intensity of ten foot candles at the working plane is provided in these rooms.

In a district of this size, decided economies in first cost of buildings and in operating costs may be effected by housing the junior and senior high schools in one building as is done at Puyallup. Not only in the auditorium and gymnasium, but in the manual arts, the home economics and the science departments, a considerable duplication of equipment is eliminated. In the maintenance and operation of the building, also, the combination building is more economical than two separate buildings would be.

How Sliding and Folding Doors Provide Additional Space

Ninety-nine out of every one hundred school buildings cost in excess of the appropriation made for their construction. In many states the statutory limitation is such that it is almost impossible to raise sufficient funds by vote and direct levy to provide school facilities adequate for the rapidly growing school enrollment. The school architect, having a limited appropriation, usually finds it necessary to eliminate certain desirable features of the building, and in many cases he must omit vitally necessary rooms or reduce departments to only the bare necessities in order to build at all.

In order to supply room for certain activities,

partitions between rooms are made up of door sections hinged together in sections of two, held in position when closed by a floor guide, which is recessed into the floor and flush with the top of the floor, and by hangers supported on ball-bearing rollers in a metal track, installed to suit the architects' design, with the tracks entirely concealed in the ceiling beams. The value of this method of throwing rooms together can scarcely be estimated, since many large gatherings may be made possible in small schools where the funds available will not finance the installation of a large auditorium or gymnasium. By this means two or three classrooms can be made into one large room with a portable stage at one end.

The Combined Auditorium and Gymnasium

Many of the large community consolidated, centralized or township high schools are making use of a combined auditorium and gymnasium, with the gymnasium used as a stage. With this arrangement, the entire side of the gymnasium is made of folding doors from 15 to 20 feet high, approximately 3 feet wide and 2¼ to 2¾ inches thick to ensure stability. The doors are supported on the metal hangers. The track is carried from the beam, plate girder or truss which spans the opening. The doors run in the floor guide and fold in a pocket recessed into the gymnasium wall, entirely out of the way, leaving a clear unobstructed view of the gymnasium stage floor when it is used for games. With this arrangement every auditorium seat is given a perfect view of all gymnasium activities. Only the heavier ball-bearing type of roller should be used and the swivel which permits the leaves of the doors to turn should also be ball-bearing.

Many schools find it necessary to use the stage for school classrooms. The stage may be skylighted, divided with sliding doors and used for art and music rooms. When the stage is needed, the doors slide back into pockets at either side of the stage arch, leaving the two rooms open for stage purposes.

Making One Room Do the Work of Two

The inventive genius of the architect will largely overcome the inconvenience of having to make one room do the work of two or three rooms, by the proper detailing of the various materials that make up the combinations. Only the highest grade door hardware should be used to overcome all danger of the doors' binding, sticking and warping. Doors should be heavy and well made and properly fitted, floor guides should be straight and even and tracks should be level and securely hung on adequate supports.

A Summary of Current Conditions in Junior College Development

Data based on answers to a questionnaire sent to all members of the American Association of Junior Colleges and to similar institutions form the basis of this study

By LEWIS WILBUR SMITH, Superintendent of Schools, Berkeley, Calif.

THE junior college is the most rapidly developing unit in the American educational system. It is changing rapidly, both in the fundamental conception of its functions and in the details of its operation. It is of the greatest importance, therefore, to make a continuous study of this rapidly growing institution. Older institutions also are rapidly changing their institutional organization, the character of their student body and their curriculum set-up, and they need the benefit of the experience and data that may be secured from contemporary institutions.

The American Association of Junior Colleges a few years ago appointed a research committee whose function was to make continuous fundamental studies of the conditions of junior college development. Its first objective was to secure a subvention of ample proportions, possibly from one of the great foundations, to make a nationwide study of the junior college movement and incidentally a study of the whole secondary school field as it might be related to this upper unit. Some progress had been made in the formulation of plans for this extended study when, through the initiative of the North Central Association of Colleges and Secondary Schools, Congress made an appropriation for a countrywide investigation of secondary education under the auspices of the U. S. Office of Education.

Questionnaire Method Used

The secretary of the association, Doak S. Campbell, in the spring of 1928 sent a questionnaire to all the members of the American Association of Junior Colleges and to any other institutions that might be available for such a purpose. These questionnaires were turned over to me for tabulation and interpretation and a preliminary report was made at the annual meeting of the association in Dallas, Texas, in November, 1928. I have further

studied the material and the results of the study are presented here. Because independent investigators over the country have on their own account realized the importance of making a study, it has seemed desirable in this paper to present a summary of some of the results of their studies in connection with those developed from the questionnaire mentioned. It is thus sought to assemble the best and most up-to-date information available. Bibliographic references are made to this material in the body of the paper.

How Information Is Organized

The questionnaire referred to served a twofold purpose. First it was used as a basis for granting membership in the American Association of Junior Colleges. The second and most important purpose was for the assembling of whatever data might prove of value.

There were 120 responses to the inquiry. Some of the replies were obviously inaccurate and were not usable. In other cases certain questions were answered unsatisfactorily and the replies had to be eliminated from the study. The result is that the number of responses tabulated is not uniform. Some of the items concern a relatively small number of schools. While such a small number is not sufficient to set up a guiding principle for the item in question, nevertheless it is significant information that will prove valuable to administrators who study it.

It is apparent that the number involved and certain other questions indicate definite trends in junior college development. The information returned on this set of blanks is organized in five general divisions: (1) the size and growth of junior colleges; (2) the teaching staff; (3) the curriculum; (4) specialized equipment, and (5) finances.

The information contained in the questionnaires

that were returned showed the junior colleges to be divided into three main groups: those supported by public funds, those supported by private funds and those supported by both private and public funds.

The division was made on the following basis:

Junior colleges were listed as public, or supported by public funds, when (a) they were supported exclusively by income from the city, the state or the Government; (b) they were supported by income from the city, the state or the Government, augmented by tuition or fees paid by the students.

Junior colleges were listed as private, or supported by private funds, when there was no apparent income from the city, the state or the Government, but when they were supported (a) exclusively by income from tuition or fees paid by the students; (b) exclusively by income from church or private donations; (c) by income from church or private donations augmented by tuition or fees paid by the students.

Junior colleges were listed as supported by both private and public funds when they were shown to be supported by income from both the city, the state or the Government and grants from churches or church educational societies. This income was augmented by tuition or fees paid by the students in the case of each of the three institutions so classified.

How Junior Colleges Are Classified

Each of the main groups was then further divided into two subdivisions, (1) independent junior colleges and (2) junior colleges operating jointly with high schools.

Junior colleges were listed as independent when it appeared that the institution was entirely separate from any high school or when the junior college teaching staff taught junior college courses exclusively. Junior colleges were listed as operating jointly with high schools when either a part

or all of the faculty taught both junior college and high school classes.

In Table I is set forth information obtained from the questionnaires classified according to support of and enrollment in junior colleges. The left column classifies the institutions on the basis of the size as shown by enrollments. It will be noticed from this tabulation that a large number of the junior colleges in this list are still relatively small, the enrollments ranging from 99 to 200.

What Whitney's Study Shows

Other studies on this topic are more complete and valuable than that derived from the questionnaire in the present study. I refer particularly to that made by Whitney¹ in 1928. Whitney's information was taken from thirty-nine states, the District of Columbia and the Philippine Islands. He found that the public junior colleges have the greatest range from less than 25 to 2,883 students. Q3-174, median 108, Q1-159, interquartile range 58. Private junior colleges: the range is from below 24 to 525. Q3-107, median 62, Q1-32, interquartile range 38. Both public and private junior colleges together: Q3-133, median 76, Q1-40, interquartile range 46. The total number of public junior colleges was 146 or 38 per cent. The total number of private junior colleges constitutes 236, or 62 per cent. The total was 382.

It should be noted in this connection that most writers have a slightly different method of classifying junior colleges. Whitney lists two main types of junior colleges: (1) those that are a part of the local public school system; (2) state supported junior colleges. In addition to this he lists four types of private junior colleges: church, private venture, Y. M. C. A. and P. E. O. He found 165 church junior colleges, which is 69.9 per cent of the total; 66 private venture colleges, 28 per

¹Whitney, F. L., *The Junior College in America*, Colorado Teachers College Education Series, No. 5, Colorado State Teachers College, Greeley, 1928.

TABLE I—JUNIOR COLLEGES CLASSIFIED ACCORDING TO SUPPORT AND ENROLLMENT

Enrollment	Number of Public Junior Colleges		Number of Private Junior Colleges		Number Supported by Both Private and Public Funds		Total Number of Junior Colleges in All Three Classes	
	1926-27	1927-28	1926-27	1927-28	1926-27	1927-28	1926-27	1927-28
None	7	0	4	0	2	0	13*	0
99 or less	11	11	32	33	0	2	43	46
100 to 199	8	12	15	18	0	0	23	30
200 to 299	4	3	9	6	1	1	14	10
300 to 399	0	3	1	3	0	0	1	6
400 to 499	0	1	0	0	0	0	0	1
500 to 999	1	1	0	0	0	0	1	1
1,000 or more	2	2	0	1	0	0	2	3
Totals	33	33	61	61	3	3	97	97

*It is to be noted that 13 of the above junior colleges began their work in 1927-28. This accounts for the number 13 as having no enrollment during the year 1926-27.

TABLE II—AVERAGE SALARIES PAID TO PUBLIC JUNIOR COLLEGE INSTRUCTORS IN SIX SPECIFIC DEPARTMENTS

Department	Average Salaries in Five Independent Public Junior Colleges, Offering the Two-Year Course		Average Salaries in Seventeen Junior Colleges Operating Jointly With High Schools and Offering the Two-Year Course	
	Average Salary	Range	Average Salary	Range
English	\$2,375	\$1,800-3,000	\$2,035	\$1,020-3,500
Modern language	2,580	1,800-4,000	2,030	1,485-2,600
History	2,400	2,000-2,800	2,170	1,655-3,700
Mathematics	2,400	2,000-2,700	2,270	1,575-3,500
Chemistry	2,460	2,100-2,800	2,196	1,655-3,050
Education	2,960	2,000-3,500	2,558	2,025-4,000

General average salary, regardless of department: in six independent public junior colleges, \$2,570 per instructor; in junior colleges operating jointly with high schools, \$2,533 per instructor.

cent of the total; 4 Y. M. C. A., or 1.7 per cent, and 1 P. E. O. junior college.

The most significant figures recently prepared concerning type, size and growth of junior colleges are those compiled by Koos¹ in 1928. The two sources of his material in this survey are two studies, the first his monumental study of 1922, which is the classic in this field, and the other a survey of growth made during 1927. In the 1927 study inquiries were sent to state departments of education, state universities and the junior colleges already on the author's lists. He has presented this material in the table which follows:

Measures	Public J.C.		State J.C.		Private J.C.		All J.C.	
	1922	1927	1922	1927	1922	1927	1922	1927
Q1	39	49	28	73	28	36	28	41
Q2	60	103	78	101	44	70	47	80
Q3	151	194	195	164	72	116	85	138
Av.	145	188	156	157	61	90	89	125

In this tabulation the phenomenal development of junior colleges in the last few years, in this case five years, is dramatically set forth. The significant features of this tabulation are apparent, but it is interesting to note that there is a movement upward all along the line in the five-year period. This rapid increase is more completely shown in Koos' second table shown below:

Type or Unit	Schools			Students		
	No. in 1922	No. in 1927	Per Cent Increase	No. in 1922	No. in 1927	Per Cent Increase
Public	46	105	128	5,163	16,382	217
State	24	31	29	3,276	3,163	15
Private	137	189	38	7,682	15,485	102
All types	207	325	57	16,121	35,630	121

¹Koos, L. V., Recent Growth of the Junior College, School Review, April 20, 1928, vol. 36, pp. 256-266.

In this tabulation it will be noticed that the increase in public junior college enrollment started in 1922 with 5,163 and mounted in 1927 to 16,382, an increase of 217 per cent. Enrollment in private junior colleges showed a similar, although not so large increase. It is interesting that the number of public junior colleges increased in this period from 46 to 105, an increase of 128 per cent, while private junior colleges increased from 137 to 189, an increase of 38 per cent.

Many new junior colleges are being organized in all parts of the country, and one of the first questions raised by governing boards with reference to the inauguration of this new educational enterprise is the proper size of the teaching load to be assigned to the new faculty. Other junior colleges are in the early stages of their growth, and the same question is pertinent for them. In fact all junior colleges are constantly changing their practice in this respect. The data assembled relative to this matter show that the ratio of teachers to students ranges from 10 to 30, with the central tendency at 21. There are a great number of public junior colleges operating jointly with high schools. The questionnaire did not bring out the practices in this type of institution.

Similar data pertaining to private junior colleges show the average ratio of teachers to students to range from 11 to 14 and also suggest that the teacher load in private junior colleges is smaller than is the case in the public junior colleges, and that the number of teachers teaching both in junior colleges and in high schools is much smaller.

Next to the teaching load and closely related to it in importance is the matter of the salaries paid to junior college instructors. In Table II are shown the average salaries paid to public junior college instructors in six specific departments. In this case the salary ranges are shown in inde-

TABLE III—AVERAGE SALARIES PAID TO PRIVATE JUNIOR COLLEGE INSTRUCTORS IN SIX SPECIFIC DEPARTMENTS

Department	Average Salaries in Six Independent Private Junior Colleges, Offering the Two-Year Course		Average Salaries in Thirty Private Junior Colleges Operating Jointly With High Schools and Offering the Two-Year Course	
	Average Salary	Range	Average Salary	Range
English	\$2,354	\$1,800-3,300	\$2,060	\$1,100-3,600
Modern language	2,275	1,800-2,750	1,958	1,150-3,600
History	2,260	1,800-2,700	2,040	1,100-3,600
Mathematics	2,137	1,575-2,800	2,180	1,400-3,600
Chemistry	2,175	1,800-3,000	2,095	1,050-3,600
Education	2,270	1,800-2,500	2,254	1,600-3,600

The general average salary, regardless of department, was: in four independent private junior colleges, \$2,460 per instructor; in twenty-six private junior colleges operating jointly with high schools, \$1,846 per instructor.

pendent public junior colleges and in those operating jointly with high schools in separate columns. It is apparent that the average salary paid in institutions operating jointly with high schools is lower in all cases than in the independent junior colleges. This may have some significance in relation to the level of teaching preparation and ability and it is a pertinent fact to keep in mind in discussions of the comparison of these two types of institutions.

Similarly it is to be noted in Table III, which presents the average salaries paid to private junior college instructors, that the same set of facts exists, namely, that those operating jointly with high schools on the whole tend to pay smaller salaries although in both cases there are instances when the upper limit of the salary range is higher than in the case of independent junior colleges.

One of the questions that are debated most in

connection with the rapid development of junior colleges is that of the academic and professional training of the instructors. Statements are made to the effect that instructors in four-year institutions, both of the collegiate and the university type, have a higher level of academic training than those in junior colleges operating on an independent basis or in connection with public high schools.

Koos' first extended study, referred to in a previous paragraph, shows that the academic training of instructors in colleges and universities of the four-year type is more extended than that of instructors in junior colleges operating independently or cooperating with high schools.

The data referring to the teachers in the institutions reported on in this questionnaire show definite tendencies. The typical amount of preparation is over five years of work beyond the high

TABLE IV—VALUATION OF SCIENCE LABORATORY EQUIPMENT IN 30 PUBLIC JUNIOR COLLEGES OFFERING THE 2-YEAR COURSE

Science	No. of J.C.'s in Which Science Is Given	Less Than \$1,000	Valuation of Laboratory Equipment Available for Courses								Over \$9,000
			\$1,000 to \$1,999	\$2,000 to \$2,999	\$3,000 to \$3,999	\$4,000 to \$4,999	\$5,000 to \$5,999	\$6,000 to \$6,999	\$7,000 to \$7,999	\$8,000 to \$8,999	
Chemistry	24	1	4	2	6	3	1	1	2	3	1 (\$12,000)
Physics	19	2	1	4	1	2	3	1	1	2	2 (16,000)
Biology	19	3	3	4	2	2	----	2	----	1	2 (20,000)
Zoology	4	----	1	1	1	----	1	----	----	----	(10,000)
Home econ.	3	----	2	----	1	----	----	----	----	----	(25,000)
Botany	3	----	1	----	1	1	----	----	----	----	
Engineering	3	----	----	----	----	----	----	----	----	----	3 (10,000)
											(15,000)
											(18,000)
Agriculture	2	1	1	----	----	----	----	----	----	----	
Geology	2	----	----	1	1	----	----	----	----	----	
Psychology	1	1	----	----	----	----	----	----	----	----	
Pharmacy	1	----	----	----	----	----	----	----	----	----	1 (20,000)
Anatomy	1	----	----	----	1	----	----	----	----	----	

Two junior colleges did not divide the valuation of the laboratory equipment according to science, but gave as the values of their general laboratory equipment, \$6,000 in the case of one, and \$12,000 in the case of the other.

school. Characteristically it is approximately five and one-half years. This is an encouraging statement because it shows that these institutions are holding to the standard of requiring in general one year or more of graduate work approximating the master's degree. In fact, this coincides with Whitney's statement that fifteen of the twenty-four states (62.2 per cent) require the bachelor's degree and one year's satisfactory graduate work in a recognized school for members of their faculty.

Other studies have provided pertinent information on the matter of academic preparation

ever, for private institutions to stress training of this type. This tendency is shown by the number of semester hours of professional training required of teachers in junior colleges with two-year courses. It may be that the practices in the public and private secondary schools have influenced this to a considerable degree. In both of these institutions the figures found in the answers to the questionnaire show that there is a tendency to demand between twenty and twenty-five semester hours of professional training.

The questionnaire does not provide the basis for an extended study of the curriculum practices

TABLE V—ANNUAL INCOME OF 17 PUBLIC JUNIOR COLLEGES
OPERATING JOINTLY WITH HIGH SCHOOLS

Enrollment 1927-28	Number of Junior Colleges	Total Enrollment	Average Enrollment per Junior College	Total Income from Tuition, Fees ¹	Average Income per Junior College From Tuition, Fees ¹	Average Income per Capita From Tuition, Fees ¹	Total Income From City or State or United States	Average Income per Junior College From City or State or United States	Average Income per Capita From City or State or United States	Total Income From Both Sources	Average Income per Junior College From Both Sources	Average Income per Capita From Both Sources
99 or less	5	364	73	\$ 3,578 ²	\$ 715.60	\$ 9.83	\$163,775	\$32,755.00	\$449.93	\$ 67,353	\$ 33,470.60	\$459.76
100 to 199	9	1,212	135	139,462 ³	15,495.77	115.06	321,655	35,739.44	265.39	461,117	51,235.22	380.45 ⁴
200 to 299	..	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....
300 to 399	1	304	304	8,605	8,605.00	28.31	51,740	51,740.00	170.19	60,345	60,345.00	198.50
400 to 499	..	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....
500 to 999	..	....	....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1,000 or more	1	1,243	1,243	46,785	46,785.00	37.64	226,920	226,920.00	182.56	273,705	273,705.00	220.20

¹Exclusive of revenue from dining halls and dormitories.

²Two of the five junior colleges with enrollments of 99 or less charge no tuition or other fees.

³One of the nine junior colleges with enrollments of 100 to 199 charges no tuition or other fees.

⁴One junior college included in this group (the New Mexico Military Institute Junior College) received an additional income from a \$20,000 productive endowment, which figure was not included in the above totals.

of junior college teachers. Proctor¹ says that approximately 7 per cent hold the doctor's degree. The master's degree plus preparation necessary for obtaining the high school teacher's certificate is held by approximately 40 per cent and those holding the bachelor's degree plus the teaching certificate by approximately 36 per cent, leaving 16 per cent without a degree but holding special certificates for teaching subjects in which they are proficient.

Up to the present time collegiate and university institutions of the four-year type have not put the same stress upon proficient preparation that has been put upon this training in the public elementary and senior high schools, even in the case of those instructors who are conducting the first two years of college work. There is a tendency, how-

of this group of schools. I believe that the American Association of Junior Colleges should make a constant study of curriculum practices and should publish it from year to year for the benefit of its members. This perhaps would be difficult in the present status of our organization and its finances. However, it is a matter of prime importance. Pertinent data are found in this questionnaire on the following items: (1) entrance requirements; (2) requirements for completion of the two-year course (a) on the basis of hours and (b) on the basis of specific subjects required; (3) information concerning the students who complete the two-year course.

The following data relating to the first item indicate the practices of 113 junior colleges in the matter of the administration of their entrance requirements for 1927-28: 38 admitted students with 14 units, 7 failed to answer this question;

¹Proctor, W. M., *The Junior College: Its Organization and Administration*, Stanford University Press, Stanford University, Calif., 1927.

11 admitted students with 13 units, 11 failed to answer this question; 64 admitted special students, 5 failed to answer; 60 allowed junior college students to carry high school subjects, 7 failed to answer; 65 admitted as regular students only those with 15 or more units, 7 failed to answer.

Determining the Entrance Requirements

It is apparent from these figures that the requirement is the same as that of the four-year institutions, namely, the admission as regular students of only those with fifteen or more units. As pertinent to this discussion, Whitney's study provides additional information. He states in general that the entrance requirements for junior colleges are the same as those for state universities or standard colleges. I quote as follows: "All four regional and national standardizing agencies require satisfactory completion of a four-year course of not less than 15 units in an accredited high school. Agencies in three-fourths of the 24 states require 15 high school units. One requires 16 and one 12 from a senior high school. . . . This is for unconditional entrance. Three states admit conditionally on the presentation of 14 secondary units, one state requiring that freshmen must be under 21 years of age. In three states the admission of special students not regularly enrolled is permitted, as is usually the case in private junior colleges."

One of the moot questions in junior college administration is whether or not the students should be allowed to carry high school subjects. I have definite convictions to the effect that since the junior college is tending to become a part of secondary education in America, institutionally as well as theoretically, this practice is thoroughly justified. The foregoing figures show that there is wide practice in support of this belief. Sixty of the institutions in this list reported that they allow junior college students to carry high school subjects along with their junior college work.

Whether or not pupils in the last year of high school should be allowed to carry junior college work if all of their high school work is completed, with the exception of two or three units, is another important question on which data are not provided in this study. It is important that information be assembled on this point at an early date. I believe that such pupils should be allowed to carry junior college work and for the same reasons.

Information assembled on the requirements for the completion of the two-year course, pertaining to public junior colleges and to private junior colleges, shows that the requirements in the two types of institutions are similar. The modal re-

quirement is 60 semester hours in each case, with the next largest number of institutions making the requirement of 64 hours. A scattering of practices is shown for other institutions.

The amount of electives in a junior college is an important consideration. The larger the specific requirements, of course, the smaller the number of electives that can be allowed. It is clear from the data that the public junior colleges are more liberal in allowing electives than are the private junior colleges, since they require a smaller number of specific subject requirements for graduation. In the case of the public junior colleges the subjects required in the order of their importance, as shown by the number of junior colleges that make the requirements, are: English, physical education, mathematics, foreign language, with history and science tying for fifth place. The five subjects leading in importance with the private junior colleges are: English, language, mathematics, history, science, with Bible as a close sixth.

In connection with the requirements for entrance and for graduation and the specific subject requirements, it may be said that all of these influences perhaps may have a bearing on the elimination of junior college students during the two-year course. Some unpublished studies, particularly that of Joseph V. Hanna, show that this elimination is quite heavy. We are faced in this matter with the same problem with which the high school is faced, a restriction of our various curricula to make them more suitable for the students who take the work. In this respect the junior college is still largely dominated by the college preparatory function that has been so pervasive a factor in high school history from the beginning of high school development.

Comparing Enrollments With Graduations

The data pertaining to public junior colleges and to private junior colleges indicate that there is a wide disparity between the total number of students completing the two-year course and the number enrolled. It is clear, of course, that as the years go by larger and larger freshmen enrollments appear and that they are in each case likely to be larger than the preceding freshmen classes, and so lessen the proportion of the graduating class to the total enrollment in the junior college.

In the case of independent public junior colleges the number of students completing the two-year course is 350 against a total enrollment of 2,500. That is, the number of students completing the course was 14 per cent of the total enrollment. In the case of the public junior colleges jointly operated the total number of students completing

TABLE VI—ANNUAL INCOME OF 37 PRIVATE JUNIOR COLLEGES
OPERATING JOINTLY WITH HIGH SCHOOLS

Enrollment 1927-28	Number of Junior Colleges	Total Enrollment	Average Enrollment	Total Income From Tuition, Fees ¹	Average Income per College From Tuition, Fees ¹	Average Income per Capita From Tuition, Fees ¹	Total Income From Church and Donations	Average Income per College From Church and Donations	Average Income per Capita From Church and Donations	Total Income From Both Sources	Average Income per College From Both Sources	Average Income per Capita From Both Sources
99 or less	17	827	49	\$239,891	\$14,111	\$290.00	\$184,455 ²	\$10,850	\$223	\$424,346 ³	\$24,961	\$513
100 to 199	14	1,924	137	449,626	32,116	234.00	91,397 ⁴	6,528	47	541,023	38,644	281
200 to 299	4	1,029	257	251,963	62,990	245.00	5,816 ⁵	1,454	5	257,779	64,445	250
300 to 399	2	781	390	65,570	32,785	84.00	13,075	6,537	16	78,645 ⁶	39,322	100
400 to 499	..	....	....	.....	.....	.....	.....	.....	....	.....	.....	....
500 to 999	..	....	....	.....	.....	.....	.....	.....	....	.....	.....	....
1,000 or more	..	....	....	.....	.....	.....	.....	.....	....	.....	.....	....

¹Exclusive of revenue from dining halls and dormitories.²Six of these schools had no income from church or productive endowments, which reduces the total and average considerably.³Seven included in the group did have additional income from productive endowments ranging in size from \$16,000 to \$300,000, which income is not included in these figures.⁴Eight institutions included in this number had no income from churches, while four had additional income from productive endowments ranging from \$10,000 to \$658,405, which income is not included in these figures.⁵Two of these institutions had no income from churches, but all four had income from productive endowments ranging from \$24,000 to \$534,764, which income is not included in these figures.⁶Both of these institutions had additional income from productive endowments of \$33,000 and \$100,000, which income is not shown in these figures.

the two-year course was 458 against a total enrollment of 2,952. That is, the total number of students completing the two-year course is 15.5 per cent of the total enrollment for 1926-27. A similar situation is shown to exist in the private junior colleges.

Under the discussion on specialized equipment it is proposed to place data concerning libraries and laboratories of the group of schools reported in this questionnaire.

Information on the library situation in public junior colleges revealed that 6 of the 8 independent public junior colleges maintained separate libraries, with volumes ranging from 2,000 to 9,000 in number; one had a separate section of 800 volumes in the high school library; one did not maintain a separate library, but indicated that there were 3,420 volumes in their library.

Thirteen of the 22 public junior colleges operating jointly with high schools did not maintain libraries separate from that of the high school. The number of volumes available to the junior colleges in these cases ranged from 1,190 to 7,000; six stated that separate libraries were maintained, the number of volumes ranging from 300 to 30,000; two stated that the junior college library was partially separate from the high school libraries, the number of volumes in the junior college library being 800 in one case and 3,000 in

the other; one failed to state whether the library was separate but reported a library of 11,418 volumes.

Data on the library situation in independent private junior colleges revealed that 5 of the 9 independent private junior colleges maintained separate libraries with volumes ranging from 1,600 to 9,000 in number. Four did not maintain libraries separate from the high school libraries. In these cases, the volumes available to the junior colleges ranged from 35,000 to 12,300.

Library Arrangements

Forty-seven of the 52 private junior colleges operating jointly with high schools did not maintain libraries separate from that of the high school. The number of volumes available to the junior colleges in these cases ranged from 600 to 8,000. Four stated that separate libraries were maintained, the number of volumes ranging from 1,200 to 12,000. One failed to state whether a separate library was maintained and did not give the number of volumes available for junior college use.

A number of the institutions used libraries in cooperation with other institutions. Though this practice is severely criticized in many quarters, I feel that the criticism is not wholly justified. It seems that where a library is convenient to the

student body and entirely usable by them, freely and without restraint, the cooperative use of a library presents no ill effects. This is particularly true as regards public junior colleges operating jointly with high schools. It seems a serious waste of public money to operate two libraries in a junior college plant that is adjacent to or a part of a senior high school plant, as is sometimes the case. The information shown in this summary indicates that this was a successful practice on account of the large number following it.

Whitney has stated that in the requirements in material aspects of junior colleges found in the published statements of standardizing agencies in twenty-four states, it appears that the junior college library should have a definite annual appropriation for buying books and periodicals. The range is from \$200 to \$600. There should be 2,500 volumes exclusive of public documents. The library should be selected with special reference to college work.

Information with reference to laboratory equipment for the public junior colleges is provided in Table IV. Public authorities who have charge of junior colleges are often at a loss to know whether or not the demands made upon them with reference to laboratory equipment are exorbitant. This table shows in detail the practices of 30 public junior colleges for the various sciences listed.

Finance is always a serious problem in the operation of any enterprise. Data on this subject are provided in Tables V and VI. Attention is directed to the fact that definite conclusions are not to be drawn from this body of data. It has some importance, however, to the administrator, because the average income per junior college is shown in each group. When the administrator locates his institution in his proper group, he can readily compare his own income with that of the group. In the same way the income per capita may be compared. Comment in each case would depend upon the particular interest of the administrator.

The Spread of the School Savings Movement

American school children have on deposit more than \$52,000,000 in school savings banks throughout the United States, according to information brought to the attention of the Office of Education by the American Bankers Association.

Deposits in 1930 amounted to \$29,113,063.48 and after withdrawals at the end of the year, the total net savings for that period amounted to \$7,690,529.68. Interest on the sum amounted to more than \$1,299,140.

Carl A. Jessen, specialist in secondary education, in commenting on the report, said the impressive feature of the statistics was the large number of small cities in which more than 75 per cent of the pupils participated in the school savings banks. He explained that thrift movements have been pushed among children throughout the United States since the days of the World War. The inculcation of saving among them at an early age by various social agencies with the cooperation of the public schools develops habits of thrift for wise spending, he pointed out.

The Office of Education, it was explained, has not gathered statistics on school savings and the banking tendencies among the children since this is done by other agencies. The information brought to the attention of the office, however, prepared by W. E. Albig, deputy manager, American Bankers Association, points out that school savings continue to spread with the largest number of schools and the greatest number of children participating at the end of the school year, June, 1930, since the system was inaugurated eleven years ago.

Negro Problem Is Being Solved Says Rosenwald Fund Report

The Negro problem can no longer be considered among the "unduly difficult" questions in the United States, Edwin R. Embree, president of the Julius Rosenwald Fund, states in the annual report of the fund.

During the fiscal year ended June 30, 1930, the fund expended a total of \$1,875,655. This was divided among the following projects: Negro welfare, reducing the cost of medical care, general educational experiments, study of social problems and public administration.

Pledges for future work slightly exceed \$5,000,000, the report states.

The fund expended \$1,317,739 for Negro welfare, most of which went into schools. Five thousand of these schools have been built, the last being at Greenbrier, Va. In this typical case the Rosenwald Fund gave \$2,600, the Negroes of the community \$1,000 and the public treasury the remaining \$16,000. It is Mr. Rosenwald's policy to give only a small percentage of the total cost of each school.

For Negro health the fund expended \$163,815, through which nursing services were endowed, health clinics established and Negro maladies studied. Payments of \$157,572 were made for studies and experiments in low cost medical treatment, virtually all in Chicago, Philadelphia, Boston and Keokuk, Ia., and irrespective of race.



"Ducks and Geese Are Flying South"

The accomplishments of the unit school administration of Webster Parish, Louisiana, in averting a famine by planning and supervising a food conservation program are interestingly set forth here

By E. S. RICHARDSON, Superintendent, Webster Parish Schools, Minden, La.

AN EMERGENCY of any kind carries with it an opportunity to test whether the emergency is related to or involves an individual, a railroad company, a community or a school system. We often hear the expressions, "It stood the test," or "It failed to stand the test." When an emergency has come, when the test has been made and the demands have been met successfully, we call whatever has been tested efficient. If, during the test, it is discovered that the thing tested not only met the emergency successfully but developed other valuable uses, such evidence should strengthen our faith in its efficiency and in its superior worth.

To-day in the face of depression and the unprecedented drought, banks and other institutions are considered efficient if they are able even to hold their own. To-day when an institution not only holds its own but makes a real contribution, it certainly deserves some study and consideration. If the present emergency has developed new uses for a certain type of school administration, why should it not be studied by school officials and administrators who are looking for better administrative school machinery?

It is now generally conceded that in order to be efficient a school system must do two things well: Serve the children of the classroom and serve the community. This dual function cannot be executed successfully where small entirely separate units of school government exist, controlled wholly or partially by separate boards, whose ideas and ideals are limited and often incompatible. A system of schools of this kind loosely connected makes uniformity of concerted action next to impossible. In a time of emergency or great need the schools are helpless. It is impossible to do efficient countywide team work in a system of schools without the help and direction of an efficient central office or clearing house. To do the best work for both the community and the children, this central office should be fully equipped and affiliated closely with all other agencies or organizations doing countywide extension work.

Webster Parish, Louisiana, has this type of school machinery, better known by school administrators as the extreme county unit type of school administration. Seven members constitute the school board. This board is vested with full authority to administer all schools of the parish, both

urban and rural, white and colored. It exercises its authority through its selected executive secretary, treasurer and superintendent, who is bonded and is responsible to the board for his stewardship. The members of the board are selected by the citizens for a period of six years. In order to maintain stability, their terms overlap.

Why Food Conservation Was Necessary

Webster Parish is in the northern part of the state, touching the Arkansas line on the north. It contains 609 square miles and has a population of 29,460. It lies in the territory that suffered most from the recent severe drought. All food crops were almost a total failure; acres and acres of corn did not make a grain; a food famine seemed inevitable.

It was at this point in the crisis that Webster's county unit organization supplied the leadership

advantage of this and had growing on their farms in October these crops in abundance. In the face of the approaching food famine it would have been next to a calamity to have this green food destroyed by frost which at that time was reasonably expected at an early date.

On October 20 the parish superintendent called into conference the home demonstration agent, who in Webster is employed jointly by the school board and the extension department of Louisiana State University. At this time a definite parishwide plan was agreed upon. It was decided to assemble at once all the steam cookers owned by private individuals in the parish and also to petition the police jury (county court) to order immediately by wire a carload of cans to be distributed to the farmers at cost. The home demonstration agent was to assume supervision of the whole project. Formulas and recipes for canning each particular vegetable



Pupils of the home economics departments of the Negro schools canned vegetables and meats.

through its schools, with the assistance of allied and affiliated organizations, to help put into effect a parishwide food conservation program within a short period of sixty days.

Fortunately for the parish, in the late summer and early fall of last year there was sufficient rainfall to supply enough moisture to produce peas, beans, turnips, greens and okra. The farmers took

that was then growing on the farms of the parish were immediately supplied to the school board office by the home demonstration agent. Here they were mimeographed and sent out at once to home economics teachers, parent-teacher organizations, mothers' clubs and other interested persons. Bankers, farmers and Red Cross officials were consulted and the following letter, dated October 20, and

signed by the superintendent of schools, was written to the high school principals.

"There has been projected a cooperative plan whereby the citizens of Webster Parish, both white and black, will be given an opportunity to preserve before frost their crops of fall peas, turnips, greens, okra and butter beans. After this has been done, the plan contemplates the canning of a number of

serve. I would advise that you get in touch at once with your parent-teacher organization and your local agricultural committee of the Webster Parish Mutual Development Association. Rapid work is necessary to beat the frost. The plan has the approval of the banks, business men, farmers, the Red Cross and others interested in this acute food situation. Mrs. Cooksey will have general charge



Lunches served to underprivileged children were made possible by the canning program.

bees that are now fat, but that will perhaps die of starvation during the winter because of the scarcity of food. To stand idly by and lose this accumulated food in the parish in the face of the present dire need would be a calamity. Hundreds in Webster Parish are going to need this food before the winter is over. With the consent of the members, the president of the police jury has purchased a carload of cans to be delivered here the middle of this week. They will be sold at actual cost. Detailed plans are now being worked out.

"This is an emergency project. It will require the best cooperative effort of every person in the parish. In this, like all other cooperative movements that touch all the people, the high school principal will be the key man in his neighborhood. Your cooperation, advice and leadership are necessary to the success of this project. Your home economics department will be given an opportunity to

of the project. Expert canners will be arranged for at each school. Several have volunteered their services."

The Webster Parish Principals' Organization was called at once in special session by its president and the plan was presented and approved. Each of the ten principals in turn presented the plan to his parent-teacher organization and the parents not only unanimously endorsed it but they agreed to take active charge of the campaign in their respective communities. The detailed plan was at once carried to the citizens through the schools by the principals and given wide publicity through the press. The importance of the movement was stressed almost daily by letters from the school board office. The impending frost necessitated intensive, continuous publicity.

It was discovered almost immediately that the home economics departments were not large enough

to meet the demands made by the communities. Green vegetables came in literally by wagon and truck loads. The interest manifested was far greater than was expected. The intensity of community activity grew almost immediately to such proportions that the school board was forced to buy eleven extra canners. The school board's construction foreman with the school board utility truck was forced to devote his entire time to the setting up of improvised canning plants near the school sites. For sixty days he transferred the steam reports, sealers and canning paraphernalia from one school to another according to a parishwide schedule. With a total of thirty steam pressure cookers, two fifteen-canner plants were operated at the same time in two different communities.

This cooperative parishwide effort included both races. The Negroes of the parish took advantage of the cooperative project and hundreds of them learned how to use steam pressure cookers. They are planning to purchase a steam cooker for each of the twenty Rosenwald schools this year.

Several communities built improvised furnaces for the canners. Old buildings in the communities were equipped and used as temporary canning plants.

Frost came at last. Thousands of dollars' worth of green foodstuff perished. Farmers regretted that the campaign was not begun earlier. They said that the canning campaign had taught them a valuable lesson and that they would not soon forget it.

The development of the campaign, methods of publicity and the progress made can best be told by

a few extracts taken from consecutive letters written for the public but addressed to the high school principals, the key men of the communities.

"October 23.

"Time is short. Ducks and geese are flying South. Every man, woman and child will have to lend active support now in order to preserve the thousands of green foods that are now growing on the face of the earth in Webster.

"The school board, the police jury, the home demonstration agent, the home economics departments of the high schools, the high school principals, the pupils, the school bus drivers, the parent-teacher organizations, the churches, the merchants and the farmers are urged to lend their active support now. It is imperative that we preserve the food now existing in the form of green vegetables on the farms. We are going to need them this winter. The canning of beeves will be taken up after frost."

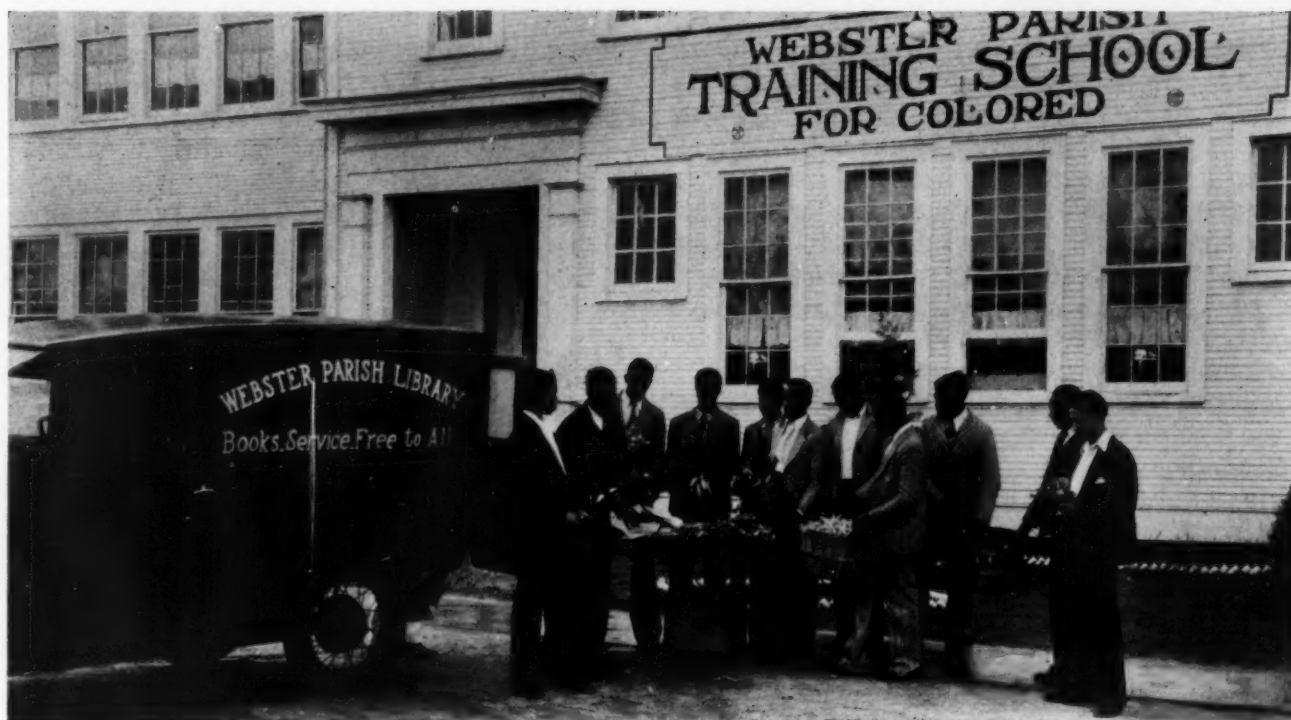
"October 24.

"A distinguished citizen said over the radio recently that only 5 per cent of the people really think, 10 per cent think they think and 85 per cent never think at all. I am not vouching for the truth of this statement. Evidently the 5 per cent includes the women of Webster Parish, for they have, according to Mrs. Cooksey, home demonstration agent, stored in their pantries for the winter from 250 to 1,000 quarts of fruits, vegetables and meats.

"The children of the Evergreen School brought peas from home ready for the canners. Notwithstanding the fact that yesterday was one of the worst days that we have had this year, these mothers were very busy. They were 'canning in the rain'



The home economics kitchen in the high school was used for canning, the mothers' organization cooperating with the home economics department.



The Webster Parish Library truck was used to convey vegetables from the farms of the community to the schools during the drought emergency.

instead of 'Singing in the Rain.' This morning the geese and ducks are still flying South. We must all get busy. The new hotel size canner donated by the Minden Lions Club has been received. First come, first served."

"October 25.

"The canning project had a close call last night. The light frost, however, did not injure the green foodstuff.

"If we have a few more days of open weather the mothers and housewives cooperating with the home economics teachers under the direction of Mrs. Cooksey would can everything green in the parish that is good to eat. If you have not visited one of these cooperative canning bouts, I advise you to quit your business and see what the organized men and women of the parish are doing in a cooperative way to preserve foodstuff that will be ruined with the first freeze. If you have not organized your community, my advice to you is to get busy at once."

"October 29.

"One would judge from the intensity of the campaign in some communities that the women are putting on a marathon endurance canning race. Minden and Evergreen have been canning constantly since the first day.

"Last night the Negroes held a mass meeting in the auditorium of the Webster Parish Training School at which time their parishwide campaign was launched. One Negro farmer brought in two hampers of beans. He said he left at home nine

hampers already gathered. They have set next Thursday to can at the training school. Judging from the interest and enthusiasm manifested at the meeting, it will be a gala day for the colored people of the community."

"October 30.

"Canning is still going on at full blast. A freeze is getting nearer and nearer. Geese and ducks are flying South in larger numbers. Only a few days are left in which to can green vegetables.

"We were honored to-day by a visit from a group of Arkansas school officials who were profoundly impressed with a school system that could render on so short notice such valuable service in the matter of preserving foodstuffs in time of so great a need."

"October 31.

"If you are in doubt about what is going on in Webster Parish relative to canning, make a visit to one of the schools and you will be convinced that the canning activity has reached the 'nth' degree."

"November 3.

"This parishwide canning campaign is still going on at high tension. We have had a setback due to the frost last night. Some communities gathered vegetables yesterday. I have just returned from two canning projects. Both are running in full blast. The Doyline community has fixed up two rooms in the old grade building, equipped them with stoves and with running water. Mothers and housewives are at work, and all seem to be very happy."

"November 4.

"One of the first stories that my father told me when I was a child—and I have heard it many times since—was about a man who was so lazy that his neighbors decided to bury him alive. On the way to the grave the procession was met by a stranger who asked that this not be done. He offered to furnish him a bushel of corn rather than have him buried alive. The live corpse rose in the casket and asked if the corn was shelled. The stranger replied no, that he could soon do that. The live corpse lay back and told them to drive on. During my entire life I have thought that my father told this to illustrate a point. I saw the man to-day. He said that he had plenty of butter beans to can but that they were not shelled, and so they were destroyed by the frost."

"November 7.

"I have just called at the office of the secretary of the Minden Chamber of Commerce where Mrs. Holmes of the Red Cross is stationed and received this rather startling information. She said that during the past two days there had been 150 applicants for food and clothing from various parts of the parish. I am not giving this information to alarm you. However, we must all admit that the situation is grave indeed. What will it be in mid-winter?"

"November 11.

"Never before in the history of Webster Parish have our people been confronted with a problem so acute regarding the lack of food and clothing. We have a lot of children, both white and black, who are without adequate shoes and clothing to keep them warm."

"November 22.

"There are exactly thirty-two canning days before Christmas. The communities of the parish have put up for their winter use during the past week sixty-four beeves, Evergreen leading. They canned thirty and are still going strong. The only way for a fat Webster Parish yearling to escape the canner is to leave the parish at once."

"December 10.

"This calamity has taught us two important things. First, the real need of the spirit of cooperation that is necessary to make any community worth while; second, hundreds of persons have learned how to operate steam pressure canners. If the project continues from now until Christmas, the parish will have preserved at least \$10,000 worth of foodstuff. C. W. Warburton, secretary, Federal Drought Relief Committee, Washington, D. C., in a letter to me says: 'If a similar plan had been adopted generally throughout the drought area there would be much less need for relief measures on the part of the American Red Cross and the

Government during the coming winter and spring than now seems probable.'"

Webster's intensive food conservation campaign closed on December 19. Thousands of cans of vegetables were conserved and 225 beeves lost their lives. From one-eighth to one-sixth of the total was stored in school pantries and is now being used by the parent-teacher organizations to supply noon-day luncheon to underprivileged children.

Newspaper Comments Were Favorable

This program has received favorable mention over the radio from Washington, D. C., and the press has written many laudatory editorials. The following is a copy of an editorial appearing in the *Daily States* of New Orleans:

"Webster Parish long has been a leader in educational innovation and development and its work is held as an example to other parishes and other states. It has taken again a leadership, and largely through the initiative and energy of E. S. Richardson, superintendent of its schools.

"For the past two months Webster has extensively engaged in the canning of vegetables and meats as an economic measure and a set-off to the disastrous drought of last year and the general business depression resulting from inadequate prices from farm crops.

"The canning movement was launched on October 20, under the management of Mr. Richardson and Mrs. Cooksey, home demonstration agent. The interest and the intensity of the movement may be judged from the fact that in two months 50,000 cans of vegetables, poultry and beef were turned out, of a value of \$10,000. This does not include the number of cans put up by hundreds of private individuals, nor the value they represent."

Results Will Be Permanent

The *Minden Signal-Tribune* "Considers this co-operative project a practical educational ladder, leading from the very bottom of the well of despondency and gloom to a better agricultural day for Webster.

"The movement having proved a success, it is not to be transitory but permanent. All over Webster the possibilities have impressed themselves on the people, and it is planned to have all classes of the population, men and women and school children, white and black, every year preserve their surplus foodstuffs of all kinds by the canning methods Mr. Richardson and Mrs. Cooksey have introduced. If this had been done before, Webster's suffering from the drought of 1930 would have been infinitely less severe than it was."

According to the *Shreveport Journal*, "The Webster movement is spreading all over northern Lou-

isiana and is attracting attention at Washington and winning the approval of the agricultural authorities, who believe that if the Webster system can be universally introduced, hard times in the rural districts will lose some of their sting. We recommend what Webster has done to the southern Louisiana parishes which have suffered from the lack of decent prices for the surplus of vegetables and other foodstuffs they produce."

Early in the article it was pointed out that an

spect. All buildings are electrically lighted, steam heated, equipped with sanitary appliances, hot and cold baths and supplied with deep well water served through sanitary drinking fountains. Principals' homes are being provided. All have been completed except one.

Each school is in charge of a competent trained principal of educational leadership and ability, who is required to devote at least one-fourth of his time to actual classroom supervision. The children are



The schools' construction foreman with the school utility truck devoted his entire time to setting up improvised canning plants near the school sites.

efficient school system must do two things well: Serve the children of the classroom and serve the community. The story of how the county unit form of school administration served its community in a time of emergency has been told. How this same county unit form of school government has served and is now serving its children in the classroom is also an interesting story.

Education in Webster Parish

During these years, under the county unit form of school government, Webster Parish schools have attained high standards of efficiency. To-day there are ten high school centers instead of thirty-nine. Each community enjoys a commodious modern up-to-date school plant, on sites ranging from eight to thirty acres. All buildings are brick except one, which is a wooden building but modern in every re-

being taught by competent faculties who are paid according to a uniform schedule. Teachers are carefully selected and supervised by able supervisors. Elementary teachers are required by law to have at least two years of teacher training work above graduation from a four-year high school. Teachers of high school subjects are required to hold college diplomas.

A parishwide library in charge of trained librarians has been installed, which supplies ample reading material for both white and black. This additional educational feature has come to Webster through a cooperative arrangement with the Julius Rosenwald Fund and the Louisiana Library Commission.

In order to give all the children of the parish equal educational advantages, forty-five auto school busses, with a capacity ranging from thirty-five to

115, have been provided by the parish school board to bring children from the farms that are over two miles from schools.

This organized plan makes it possible to have all children, both urban and rural, taught by progressive teachers under the direction and supervision of trained principals. The children are comfortably seated in well equipped classrooms, where copies of the master paintings hang on the walls and where proper lighting and ventilation have been provided by a capable architect.

The health of the children of Webster is carefully guarded by an efficient health staff and extra food is provided for malnourished children. Serums for the most common local preventable diseases are administered free. Besides this, the sanitary staff supplies to the school board monthly a definite sanitary report on each of the school plants. This additional important service to all the schools is made possible by the county unit organization of school administration.¹

Buffalo's Excellent System of Vocational Education

Buffalo, N. Y., has set up a system of vocational education which puts it in the front rank among American cities now teaching the trades and industries, Maris M. Proffit, senior specialist in industrial education declares in a study just published by the Office of Education.

The city, described as a pioneer in such training, has developed many contacts with its industries, Mr. Proffit states. Citing the courses in aviation as an example, he calls attention to the cooperation between business firms and the educational administration.

Buffalo is rendering a large service to persons employed in the trades and industries of the city through the evening schools conducted by the four vocational high schools. The enrollment in evening classes is limited to apprentices and journeyman workers, and shop courses are provided in accordance with the trade or industry in which they are employed. This ensures that the money spent on the evening schools will be for the benefit of those for whom it will have the greatest value.

Buffalo has done pioneer work in the development of training courses with a trade vocational objective. The progress made has been greatly facilitated by making the official responsible for the industrial program a deputy superintendent of schools. Such an arrangement makes possible the

development of friendly and helpful relations with industrial companies and workers; it places a man with an appreciation for industrial education in an advantageous position for obtaining a consideration of the needs of industrial education by those in control of the whole school program; and it encourages industrial and trade organizations to assist in the development of the program.

Industrial education in Buffalo has developed many and wide contacts with the industries of the city.

Finding the P. Q. of the School System

"What's Your P. Q.?" asks C. H. LeVitt, formerly superintendent of schools, Savanna, Ill., in the *Journal of Education*.

By P. Q., Mr. LeVitt says he means the relation between what the parents are doing, the interest they are taking, the cooperation they are giving and the enthusiasm they are showing in terms of what they might do if they would.

"New names and strange faces are fast crowding their way into the educational spot light," Mr. LeVitt writes. "His nibs, I. Q., held the center of the stage for a season or two. His latest photo was found pasted in the albums of his ten thousand devotees.

"Then along came E. Q.—no relation to I. Q.—with an up-to-the-minute press agent and new followers, who made his bid for popular approval. Not to be outdone, an enterprising producer brought out another star—A. Q. The lithographs state that the rôle played by A. Q.—accomplishment quotient—is to explain the relation between what Willie does and what he is expected to do. And so they go. Some day we shall have an H. Q.—health quotient—to show the amount of vim, vigor and vitality a youngster shows in comparison with what he should show if the machine were perfectly oiled, no carbon in the cylinders and hitting on all eight.

"To find the P. Q. of a school system, let the superintendent write out what the parents should know in order that they may help the schools get the maximum out of the pupils. Then let him find the number of parents who are anywhere near passing. It is not likely that there will be 200 in a community of 1,000 parents. If this were so, the system would have a P. Q. of 20 out of a possible 100. Can our schools ever expect to attain the peak of productivity with such a ratio?

"Without any great effort it might be proved that there is a high correlation between gilt edged teachers' salaries and a maximum P. Q."

¹Read at the Detroit meeting of the Department of Superintendence, N. E. A.

Introducing a Guidance Program in the Secondary School

A comprehensive plan is here outlined for guidance during the freshman year and throughout the four years of high school, eventuating in adequate preparation for choosing a college or a career

By ROY A. HINDERMAN, Department of Education, University of Wisconsin

THE insistent demand on the part of secondary school administrators for specific information on how to introduce guidance work was responsible for the preparation of this paper, which offers suggestions on how to organize a guidance service for children in a secondary school.

The program outlined is not in use in its entirety in any school system at present, but its elements are to be found working successfully in many cities throughout the United States.

According to Reavis' study of several school systems in cities of 100,000 population or over, we find that of the pupils who enter the first grade only about 10 per cent finish the twelfth grade; of those who enter high school only about one-third finish.¹

These facts are corroborated by the last census report and by Cohen's² study of Brooklyn schools.

Majority of Pupils Leave School Early

With this high mortality in mind, in 1928 a one-year study was conducted by the Bureau of Guidance and Records to determine urgent guidance needs in the United States. Several of the pertinent facts discovered were:

(1) That there are three urgent problems—educational adjustment, representing 36 per cent of the problem, occupational adjustment, representing 32 per cent of the problem, social adjustment, representing 32 per cent of the problem; (2) that while the problem of making provisions for children to remain in school longer is important, the problem of planning for them to become wage earners and take their places in social life is nearly as great; (3) the fact that educational adjustment ranks first.

It is evident that the problem of occupational

adjustment will differ for each locality, but the important point is that whatever the size of the problem it is as important to care for what there is as to care for the problems arising in either of the other two phases.¹

Individual and General Guidance

Guidance or life advisement has been suggested as a method by which we may alleviate the three problematic situations. This may be discussed in two parts: (a) general school activities or situations necessary to the successful operation of such a plan, and (b) provision for specific services through which we may assist each child.

It should be noted that most general activities are already being admirably discharged by many schools, but since it is imperative that none be overlooked we shall call attention to them briefly.

The problem of making provisions for individual differences has two important phases: (a) the small school where it is possible to use the various methods of individual instruction so the child may progress at his own rate and be challenged all along the way, such as Miller's Contract Plan, Morrison's Unit Plan and the Winnetka Plan; (b) the larger school where ability groups can be set up in the major departments based on horizontal and vertical classification or according to any of the feasible combinations. However, the large school has departments that will not lend themselves to ability grouping because of small numbers. In such cases it may select any plan of individual instruction used in the smaller schools so that provision for individual differences may be truly comprehensive.

Increasing numbers and greater specialization have made a permanent record for each pupil not only feasible but necessary for satisfactory pupil

¹Reavis, C. J., *Pupil Adjustment in the Junior and Senior High School*, D. C. Heath & Co., Boston, 1926, p. 7.

²Cohen, I. D., *Principles and Practices of Vocational Guidance*, Century Company, New York City, 1929, p. 76.

¹Hinderman, R. A., *Evaluating the Success of Guidance in Schools*, Bureau of Guidance and Records, University of Wisconsin, 1929.

OUTLINE FOR STUDYING OCCUPATIONS

- A. *General Description*
 - 1. History
 - 2. Tools and machines
 - 3. Products
 - 4. Location
 - 5. Duties of workers
 - 6. Social values
- B. *Workers*
 - 1. Social level
 - 2. Demand
 - 3. Seasonal fluctuation
- C. *Requirements*
 - 1. Personal qualities
 - 2. Necessary funds
 - 3. Physical qualities
 - 4. Educational requirements
- D. *Working Conditions*
 - 1. Sanitation
 - 2. Light
 - 3. Occupational diseases
 - 4. Accident rate
 - 5. Hours per day
 - 6. Length of vacation
 - 7. Open or closed, or combined shops
- E. *Remuneration*
 - 1. Wages or salary
 - 2. Internal promotion, etc.
 - 3. Comparison with going wage

accounting. These records commonly embody such information as: family record, scholastic achievement, personality ratings, test scores, health record and choices of a career with a list of vocational experiences. A late development is the inclusion of the pupil's photograph, which is of value to those who forget names readily.

In regard to provision for adequate library service, it has been found that most librarians are well trained and give ready assistance to the faculty in supplying professional reading materials and to the pupils in furnishing occupational information of value to them.

Many schools are providing regular monthly reports, including work covered and notations on pupil achievement. This service supplies a check so that pupils who fail to do as well as they should can be assisted. Later developments show check sheets that list specific acts that the teacher rates for each person in question so that the counselor may then do a real job of upgrading.

Definite provision for twenty or thirty pupils who are the problem of some particular staff teacher is coming to be recognized as an adequate way of giving guidance to each child. In such a setup this group of teachers becomes the key to the whole program. Since pupils' loads are becoming increasingly large and the school days are

growing longer, many far-sighted administrators have appreciated what can be accomplished through such a service and are (a) setting aside a regular allotment of from fifteen to thirty minutes a day for this work which is taken from the

VITALIZING INSTRUCTION THROUGH OCCUPATIONAL INFORMATION

Department of English

Acting as a profession
Short story writing
Novelist
Journalism
Teaching

Department of History

Diplomatic service
Chamber of commerce secretary
Law
City management
Health engineering

Department of Science

Engineering
a. Mining
b. Civil
c. Electrical
d. Mechanical
e. Chemical
f. Marine.
g. Steam and gas

Medicine

Department of Mathematics

Research
Cost estimating
Appraisal

Department of Commerce

Secretarial work
C. P. A.
Bank inspecting
Commercial law
Insurance
Salesmanship

Department of Home Economics

Textiles
Nursing
Dietetics
Home making
Beautician

Department of Physical Education

Avocations
Keeping fit
Sports
Playground, Scouts, Y. M. C. A.

Department of Industrial Education

Metal trades
Ceramics
Woodworking
Production work
Aviation

Department of Art

Portrait painting
Commercial art
Craft work
Occupational therapy
Architecture

regular school time; that is, it is being recognized that this work is as important as any other school work, therefore some of the regular school day is given over to it; (b) making upgrading aids available to this group, thus helping in remedial work; (c) holding this group responsible for the discharge of the plan outlined in the latter part of this article.

It is a happy situation when faculty members encourage the presentation of topics in the English class, as themes, that have been prepared for science. Unification or a common purpose is what makes such an endeavor possible. In many schools some of the subject matter presented is of an occupational nature.

Outlining Information on Occupations

After several years of experimentation the accompanying outline for presenting related occupational information was worked out at Riverside High School, Milwaukee, and again checked at the Wisconsin High School, Madison. The main difference between it and similar outlines is its brevity. This shorter consideration has been subscribed to by both pupils and teachers because it sustains interest and still presents the pertinent facts.

A list of some of the occupational information that is used in various schools throughout the state is here presented for consideration, with the hope that through experimentation additions and limitations will be discovered.

The final general situation to be considered is one of aiding the teaching staff in the technique of guidance services. Little need be said relative to the advisability of securing the support of the entire teaching staff on any program that is really to benefit the child, and so we merely state that all teachers should be parties to the plan.

In a consideration of this problem of providing an adequate adjustment service for each child, many questions will arise and it may seem advisable to delay some services until certain staff members indicate that they are ready and have worked out machinery to handle the work. From past experience it seems a better plan to introduce new services as the teachers indicate readiness, rather than to superimpose guidance and begin everything at once.

In the words of Registrar Holt, "One of the most vital benefits to be gained from a program of guidance is perhaps that the teachers acquire the adjustment viewpoint." That is, at the end of each class hour the teacher will come more and more to question how much each pupil derived from the instruction.

It seems desirable to introduce the following

seven general situations if we are to provide the best possible life advisement service:

1. Provide definitely for individual differences in instruction.
2. Operate a permanent record for each pupil.
3. Provide adequate library service.
4. Require monthly instructional reports.
5. Operate a home room or faculty sponsor organization.
6. Vitalize our instruction by presenting pertinent occupational information.
7. Attack the problem of providing adequate guidance as a staff and make available all devices so that the personnel may grow with the guidance work and become skillful in discharging it.

With these general situations in mind we come now to the specific provisions for introducing the service so that it may most comprehensively reach each child. In introducing the second part of our discussion, in which making provision for specific services is discussed, it may be fitting to call attention to the fact that organized guidance services in high schools are in most cases in only the beginning stages. Since that is the case we feel that our progress should be gradual and somewhat restricted rather than immediate and wholesale.

The plan, then, that we propose for consideration is organized on the basis of the four high school classes, freshmen, sophomores, juniors and seniors, with specific objectives for each one. Thus if a school should choose to follow this plan it would begin with the freshmen this year, add sophomores next year, and at the end of four years it would be administering a real service of life advisement that had been thoroughly synchronized and carefully worked out.

Important as the upper class problems are, it is our contention that if we are to keep more pupils in school for the entire course we must begin when they come to us and continue our assistance at least until they are graduated. The point we are anxious to make is that both the success and the failure of these graduates are being accredited to us, as they are the product of our secondary schools.

We propose for consideration the following specific plan for the provision of services that will assist each child.

GUIDANCE PLAN

I. Freshman Year.

1. *Objective.* Educational Adjustment. Since we are interested in reaching each school child, it is necessary to do so through some fundamental, required subject. The considerations, as the objective implies, deal largely with orientation, values and means of succeeding in school work.

UPGRADING CHECK SHEET FOR COUNSELING

..... Name Date

The teacher's judgment of a pupil is based upon observation of the pupil's acts. The counselor's efforts to help are greatly dependent upon the accuracy of the observations and the faithfulness with which they are described.

Please check the following list, and add any acts which pertain to this particular case.

F = Favorable
S = Satisfactory
U = Unfavorable

Please check one

Pupil does the following

F	S	U	Specific Acts
			<i>Appreciation</i>
			1. Concentrates on problem at hand while studying.
			2. Prepares home work on time.
			3. Writes accurately and phrases carefully.
			4. Perseveres until task is completed.
			5. Is attentive during lecture.
			6. Begins work as soon as he gets into the room.
			7. Provides needed materials on time.
			8. Does more than the minimum requirement.
			9. Works without prodding.
			10. Carries on work in laboratory as he was taught to do it in class.
			<i>Initiative</i>
			11. Solves his own problems if possible.
			12. Volunteers information.
			13. Can apply the principle to a new problem.
			14. Plans his time so he can cover all of his assignments.
			15. Sees opportunities of helping the group.
			16. Is followed willingly by members of the group.
			17. Works to maximum capacity as in a contract.
			18. Makes up work promptly.
			19. Does more outside work than is required.
			<i>Attitude</i>
			20. Acts on suggestion.
			21. Is attentive during class.
			22. Is pleasant and agreeable even under criticism.
			23. Carries projects on to completion.
			24. Is respected as an official in a game.
			25. Works even when not interested.
			26. Considers rights of group in using materials and teacher's time.
			27. Is critical of his own work.
			28. Prepares work in form it is asked for.
			29. Treats pupils and teachers courteously.
			30. Keeps himself neat and clean.
			31. Gets to class on time.
			<i>Progress</i>
			He has shown improvement in:
			32. Maintaining present level of work or in raising it.
			33. Reducing time element in problem solving.
			34. Eliminating careless mistakes.
			35. Neatness in written work.
			36. Personal conduct.
			37. Posture.
			38. Looking up materials.
			39. Laboratory technique.
			40. Handling tools or gym apparatus.

Remarks are encouraged. Please use the back of the sheet for them.

Teacher

Room

2. *Medium.* Freshman English, for this is a required subject which during the first year reaches every one.

3. *Problem.* From studies by Edgerton,¹ Reavis² and others, it is evident that pupils would find more of value and be more determined to continue in school until graduation if: they were taught the value of a high school education; if they were taught how to study; if they were taught the need for having some definite plan in choosing subjects for their high school course.

In St. Louis, Cleveland and some other places, this plan has been adopted and the text they are using is Bliss, "Your School and You."

Thus, in addition to the regular composition course, pupils would receive the three specific pieces of information as outlined above. During this year ability groups could be set up and the home room teacher could check scholastic achievement for the freshmen as evidenced by the instructional reports.

II. Sophomore Year.

1. *Objective.* Tentative Life Career Choice. While some would have us postpone such a choice, even though tentative, and some are eager to have this done during the freshman year, it seems desirable in this plan to have it come in the sophomore year. The child has made scholastic adjustment, and having taken general work as a freshman has lost nothing up to this point. Now he seems ready and free to begin to give some serious thought to the problem of a life career. He is encouraged to be open-minded and to list three possibilities that he is considering, in order of preference.

2. *Medium.* Conferences with the home room teacher and stimulation from previous years' English work.

3. *Problem.* To help determine his interests it may be advisable to secure the interest ratings on the three choices from the Strong Vocational Interest Test. This involves a small expense and during the past year has been worked out in some classes at the Wisconsin High School by having the pupil forego a movie and invest the money in this test instead. Whether the reliability warrants its use is not the only consideration, for the interest stimulated through its application in getting children to thinking about their life career problem cannot be overlooked. Further, intelligence and

special ability ratings may be employed when they seem advisable and helpful.

When the results have been surveyed, each second-year pupil should make a study of his choice according to the preceding outline for occupations study or the work book as developed by R. H. Rogers in the Central Continuation School in Milwaukee. He may seek his aid and information in the department of the school that is making use of such occupational information as a vitalizing agent for instructional purposes.

Courses in occupations afford a splendid place for such a study.

Scholastic achievement is now being checked for the freshmen and sophomores.

III. Junior Year.

1. *Objective.* Social Adjustment. As was recently stated at a Milwaukee high school faculty meeting, "The course in citizenship can help, but social adjustment for each child is the job of the whole school." This is as old as the school itself and so we are working here with one means of assisting every school child in developing correct concepts of good citizenship, leadership and followership, and the problem of budgeting or planning that is so necessary in life.

2. *Medium.* Extra-curricular work, clubs, athletics, other regular endeavors.

3. *Problem.* Every junior should participate in some extra-curricular activity. It has been suggested that every pupil in school should participate in some activity each school year, and some school programs set aside part of each school week for such a scheme. While we are firm believers in more of these activities, we feel that from the guidance standpoint we can justify our requirement for all juniors. To experience with the pupils the joys of giving that come to Milwaukee high school pupils and many others as they prepare Thanksgiving baskets or plan and carry out children's programs for the less fortunate seems to bring understanding upon which true social adjustment can be built.

How many of us could accomplish anything or make any progress if we did not stop and determine definitely each morning that these three or four things must be accomplished before the day was completed? This common and necessary practice is budgeting, and since we find it so useful we are proposing it as a part of our guidance program.

4. Opportunity should be afforded in these clubs: to hold office; to do committee work; to do regular membership work; to help plan

¹Edgerton, A. H., Vocational Guidance and Counseling, The Macmillan Company, New York City, 1926, chap. 1.

²Reavis, C. J., Pupil Adjustment in Junior and Senior High School, D. C. Heath & Co., Boston, 1926, chap. 2.

projects involving time and funds for the successful operation of the club (and to develop habits to be used later on in life). Home room teachers would continue to assist pupils in reaching high achievement levels. High school credits earned would be checked and those needed for graduation would be tested by each junior.

IV. Senior Year.

1. *Objective.* Occupational Adjustment. Many now consider that whether a pupil chooses work or college after secondary school the problems are not essentially different since they both represent an adjustment to a specific preparation for life work. Hence we come now at the end of three years to the point where we are called upon to assist each child in bridging the gap between school and beginning work or entrance into college.

2. *Medium.* Committee on Guidance, Principal, Vice-Principal and Department Heads. This group can impart wisdom and advice that will be of great value to the seniors.

3. *Problem.* Note change in choice of a career or adherence to the original choice made in the second year.

4. *Arrange for Interviews with Persons Outside.* It has been found that business people are more than willing to assist boys and girls, and when they are called upon at this vital time their service is not only cheerfully given but is carefully considered by the counselees.

5. *Securing Information on How to Apply for a Position.* In response to the numerous articles in the *Saturday Evening Post*, the *American Magazine* and *Business*, together with the general awakening of our graduates, much is being done in the way of making definite preparation for these first business interviews.

6. *Consider a Plan for Working Up in an Industry and Actually Spend Some of the Year in Getting a Position.* It is of interest to note that about two years ago a leader in one of Milwaukee's most important industries said that his concern would welcome boys or girls with a plan. He indicated that it could be agreed upon and then either party could call the attention of the other to it.

7. *Follow-Up and General Help.* This is to be done as called for and found expedient.

After the seven general situations have been established, a four-year program may be begun with the freshmen, providing educational adjustment for them through instruction in English.

In the sophomore year the program would be continued by helping pupils to choose careers tentatively and checking this procedure by occupational study and various testing procedures. The juniors would be added to the program the third year with the idea of assisting them to develop abilities in social adjustment through participation in extra-curricular activities. The fourth year, the seniors would actually make plans for entering college or securing employment and would make business contacts as they would have to do when they leave school and embark on their careers.

School Board Head Wants Survey of New York City Schools

A survey of the schools of New York City will probably be started in September, in accordance with a request made by Dr. George J. Ryan, president, board of education, to the New York State Board of Regents. It is understood that Dr. George M. Wiley, assistant state commissioner of education, will be in charge of the investigation.

Such an investigation, Doctor Ryan said, is asked "in view of the irresponsible charges that have been made from time to time with respect to the efficiency of the New York Public Schools."

It is Doctor Ryan's belief that "the children of the public schools of New York City have scholastic records of which their parents may well be proud. For years they have led the entire state in the matter of passing Regents' examinations. Those of us who know the facts feel that the schools of New York are thoroughly efficient. The survey is sought that all the facts may be developed impartially."

Liberal Arts College Movement Is Described in Recent Bulletin

The *Liberal Arts College Bulletin* for June is devoted to a history and description of a number of the leading liberal arts colleges in this country. It is generously illustrated. Articles, written in the main by college presidents, include the following: "The Historic Colonial Colleges"; "The Rise of Colleges, 1800-1860"; "Colleges in the Old South"; "Colleges in the West"; "In Texas"; "Colleges in the Far West."

Under the caption "The Church and the Colleges," colleges under the control of the various churches are discussed. The development of education for women is also discussed.



How to Vitalize the Teaching of Citizenship

Student government at McLoughlin Union High School, Milton-Freewater, Ore., weaves into the lives of the pupils experiences that help them later to adapt themselves to community life

By HAROLD G. BROWNSON, Principal, McLoughlin Union High School, Milton-Freewater, Ore.

WE may talk about democracy and the responsibility of the individual within his social group all we wish, yet we shall get nowhere until through some practical method we give our young people the opportunity to practice for citizenship. We must give them the opportunity to assume responsibilities—a chance to learn by doing. Citizenship should be learned by doing just as the operation of a car is learned by driving.

At McLoughlin Union High School, Milton-Freewater, Ore., an attempt has been made to develop a sense of genuine citizenship in all pupils by making them actual citizens in the community in which they spend the major portion of their time, namely, the school. A system of student government has been evolved whereby the teacher is no longer the policeman of the organization. The pupils are responsible for their conduct and for what happens within their group. There are no teachers on hall duty at any time during the school day. There are

no teachers in roll rooms. The study hall is in charge of pupil monitors. The quietness of the halls, roll rooms and study hall and the opportunity to study within the building depend on the order maintained by pupils under the leadership of monitors chosen from among themselves by themselves.

The student body is the ultimate source of power and authority just as in the state government the people have the final authority. A student constitution outlines the structure of the government and provides the fundamental law of the student organization. A student council comparable to the legislature makes rules, but these rules, as in the case of the laws of legislatures, are subject to the will of the people. A system of student courts provides means of administering justice to those pupils who may violate traditions or regulations of the student social group. As a result of this organization the regulations of conduct are in great measure determined by the pupils under the guidance, not the

dictation, of the faculty. Likewise the maintenance of their standards is a responsibility of the pupils and their officers.

Just as in a state it is necessary that certain laws be made for the general welfare of society, so in a school organization certain rules must be determined for the welfare of all. For instance, it is necessary that rules be provided for conduct in a study hall in order that the pupils may do their work. The study hall like the halls and roll rooms is in charge of monitors elected from each of the study hall groups. The monitor presides and is expected to maintain standards, just as sheriffs, elected from each county in a state, are expected to maintain laws in their respective counties. Pupils who violate rules may be reported to the court clerk by any of the monitors for the halls, roll rooms and study halls or by any teacher or other pupil-citizen.

Violators of School Laws Brought to Trial

A jury composed of eight members, two from each class, presided over by a judge elected from the senior class hears all cases and after determining the guilt, passes sentences. A faculty adviser sits with the court to advise but not to dictate. If necessary, pupils are removed from the student group, just as in the state offenders against laws are sometimes removed from the social group to prisons. Pupils may be placed in a detention room during their roll room and study hall periods and denied general privileges if necessary. If any convicted pupil feels that his trial has been unfair, he may appeal to the student supreme court for a review of his case. The supreme court is composed of the presidents of various classes, presidents of all organizations with more than fifty members and monitors.¹

It is remarkable how successfully the form of student government has functioned. Pupils as a group are jealous of their rights of citizenship and dislike to have teachers interfere in their problems, just as our colonial ancestors were jealous of their rights and resented interference by the king and the royal governors. Pupils do report violations of conduct, and their court has tried numerous cases and handed down decisions relative to punishments. When visitors come to the high school they are invited to go about the building without being accompanied by the teachers in order that they may see just how student government is operating, and they uniformly find conduct as satisfactory as in schools with teacher surveillance.

In the first place, the correct attitude on the part of the pupils must be developed. This can be done

in great measure by the introduction of case studies on problems of government. Such case studies may be worked out so as to apply to local situations, mimeographed and given to the pupils in their English classes. Each case problem should be made a part of a regular class assignment in order that the attention of all pupils may be focused on certain definite matters. As various difficulties arise, new case studies may be worked out. An example of a case study that was used to "educate" pupils for their jobs follows:

"At the opening of school R. D. Wolf, principal, Western High School, suggested to the pupils that they might have a form of student government if they wished. A committee was formed and a plan worked out whereby the pupils should assume certain responsibilities in regard to conduct and the care of the building.

"After the constitution was drawn up it was voted upon by the student body and carried by a two-thirds vote. Pupil officers, including monitors of the halls and corridors, were elected in due form. Each pupil pledged to support student government and in addition each officer and monitor pledged on his honor to fulfill the responsibilities of his office.

"Among the elected monitors was James Didion. On Thursday morning following James' election he happened to be in the study hall and noticed Russell Bode marking one of the desks. James spoke to Russell and requested that he stop. Russell told James to mind his own business. James replied that he was minding his own business. Russell refused to stop and continued to carve initials on one of the desks and James reported him to the student court. The student court recommended to the principal that Russell be sent home for his father. Mr. Bode came to the school as requested, said he regretted the affair and offered to pay for any damage done. He told the principal, however, that he was not in favor of such a system of government because it made a boy like James a tattletale."

What Pupils Think of Self-Government

On the second day after the case study was assigned, thought questions were given to all the pupils which they were to answer and return. The following questions were used for the case study on representative government. The answers are included.

1. Was the system of student government put into operation in a fair manner? Yes, 276; no, 2.
2. Did Russell have a right to oppose the introduction of student government? Yes, 267; no, 11.
3. After its adoption by the two-thirds vote, was Russell justified in opposing the will of the majority by refusing to obey? Yes, 10; no, 268.

¹A copy of the student body constitution may be had by communicating with the author.

4. In view of the facts did James do the proper thing in reporting Russell? Yes, 274; no, 4.

5. Should James have reported Russell without having first warned him? Yes, 34; no, 274.

6. Do you consider that James was a tattletale? Yes, 4; no, 274.

7. Would Russell have been justified in claiming that the government of the school was the job of just the teachers? Yes, 16; no, 262.

8. If you had been present at the time Russell was carving the desk and your testimony was needed to convict Russell in the student court would you have been willing to testify against him? Yes, 250; no, 33.

9. Was Russell's father justified in his attitude toward the system of student government? Yes, 37; no, 241.

Analysis of the replies of pupils indicates that though practically every pupil felt that the plan had been introduced fairly and that James did the proper thing in reporting Russell and was not a tattletale, several pupils felt that Russell would have been justified in claiming that the government of the school was the job of the teachers, and 10 per cent stated that they would have been unwilling to testify against Russell. Further investigation showed that some pupils were not enthusiastic for student government and felt that teachers were paid to handle the problems of discipline. These

pupils felt that even though a pupil reported Russell, his punishment should be meted out to him by the faculty and not by the pupils.

A variety of reasons developed to account for the number of pupils who stated that they would have been unwilling to testify against Russell. Some stated that they would have been willing to testify against Russell if they had been monitors but if not they would have refrained from interfering; some stated that they would have hesitated to testify if Russell had been a friend; several underclassmen felt that they would have been unwilling to testify if Russell had been an upperclassman.

It was interesting to note how many pupils felt that Russell's father was justified in his attitude toward the system of student government while at the same time they felt that the system had been introduced fairly and that James did the proper thing in reporting Russell. An investigation brought out two reasons why these pupils thought that the father was justified: Some believed that the father as a taxpayer was justified in expecting the teachers to handle disciplinary matters; others felt that since the father had not signed a pledge and probably was not aware of the responsibilities that student government entailed, he might not see the problem from the point of view of the school. These pupils felt that everyone was entitled to his opinion and that therefore the father was entitled



Student government in action—this high school library is entirely under pupil control except for a faculty librarian in charge of library procedures.

to his, even though it did not agree with the opinions of those interested in student government.

It is essential that pupils be educated to the point of view that each individual is responsible for the success of his social group. In the foregoing illustration, some pupils felt that the father needed education. If he had been a member of the group, they would not have thought that he was justified. Since the father was an outsider, however, some felt that an additional factor had been introduced.

Winning the Pupils' Cooperation

If pupils are brought to a realization of the fact that it is no more a matter of tattling for one of them to report, testify or appear against another in his own student court than it is for one citizen to cause the arrest of another for the violation of a state law, wherein the common good is affected, this problem will be effectively met. A number of examples must be introduced to help pupils get the point of view that is essential to the success of student government. Conferences should be held with individual pupils who disagree. No pupil should be forced to approve or accept student government, but everyone should be given an opportunity to understand it. Experience over a three-year period in McLoughlin Union High School indicates that pupils will assume responsibilities and that they will report, appear and testify against those who violate traditions and rules of the school. Of several hundred cases that have been tried before the school court during this time, probably not more than a dozen have been reported by faculty members.

Student government should not be forced upon the pupils. They should understand what rights and privileges it confers and the responsibilities it entails. A plan of education was introduced for unenlightened pupils telling of the advantages and disadvantages of student government before it was presented for a vote in McLoughlin Union High School.

It is desirable that the method of selecting officers be carefully worked out so that pupils may be well represented. The form established in McLoughlin Union High School provides for the election of the student body judge and the student body president from the senior class. The student body judge is nominated by the executive council, composed of presidents of the four classes and of any organizations having more than fifty members. This means that the leaders from the respective classes and organizations determine in great measure the type of pupil who shall be judge. In addition, a list of names for monitors of roll rooms, study halls and halls must be approved by the executive council.

The procedure of the court must be carried on with proper dignity. The court should be opened in formal manner. The judge and all the jurors should be administered pledges as should all witnesses before the court. In McLoughlin Union High School pledges like the following are exacted in order that the duties pupils assume may be more forcefully brought to their minds:

For judge and jury:

"I hereby pledge my honor to support the rules and regulations of McLoughlin Union High School and faithfully to discharge the duties of my office by being just, fair and impartial in all decisions made by me affecting my fellow pupils, ever keeping in mind the maintenance of the high standards of conduct and general efficiency already attained by Mac Hi, which must never be lowered."

The student court must be absolutely fair and must treat all pupils alike. We have found that pupils are not swayed by considerations of prominence or position. Last year two prominent pupils were brought before the court for truancy. One of them was a son of a member of the board of education and one was the brother of the president of the student body. These pupils were accorded the same punishment as were other pupils who committed the same type of offense and who came from families of little prominence. Punishment should be prompt and certain. One period a day is set aside in our school for extra-curricular activities and when necessary the court meets during this period. In this way the pupils' problems are handled with dispatch. It is also desirable that visitors be not permitted to visit sessions of the court since this would merely attract the curious and tend to slow up justice.

A definite method for keeping records should be established. The data relative to the offense should be noted as well as the pleading of the defendant, the decision of the jury and the penalty, if any. This record can be kept in notebook form and retained from year to year for reference purposes.

The Student Government Pledge*

Before any roll room is placed under student control, each pupil should be required to sign a memorandum agreeing to obey the regulations of the school and constitution. This is desirable in that it brings to the attention of the pupils the fact that they are pledged to cooperate in a definite form of government. The student government pledge states: "In order to promote the welfare of the school and make effective the operation of student government, I pledge myself to obey the rules and regulations of the school and the student body constitution, and especially to obey the pupil in charge in roll rooms or elsewhere during the absence of a

teacher, ever keeping in mind the maintenance of the high standards of conduct and general efficiency already attained by Mac Hi, which must never be lowered."

When a pledge is exacted from each pupil to obey student government, some pupils are found who are not in favor of student government and say flatly that they prefer teacher government. In this case the pupils are placed in roll rooms under the supervision of teachers. At all times these pupils

Honors must be awarded to pupil officers whenever possible. The student body president should be given an opportunity to be a leading number of the student organization. This may be done by keeping him in the public eye. In this school he presides at all assemblies whether the governor of the state or a person prominent in world affairs is to be the speaker or whether a program is being presented. The activities of the various pupil officers should be played up in the school newspaper and



The study hall is under the supervision of a monitor elected by the student body.

come under the authority of teachers and are not privileged to enjoy the benefits of student government. In McLoughlin Union High School, however, every pupil signed the pledge.

Student government, of course, should not apply to teachers' classrooms, for there a teacher alone must be responsible if she is to get results.

Teachers must cooperate and do their share in forwarding student government. They must not assume a suspicious attitude and be continually on the lookout for misconduct. Likewise they must obey the same regulations as the pupils do. For instance in McLoughlin Union High School, pupils may not congregate in the halls between 8:45 and 9:00 and 12:45 and 1:00 o'clock. If teachers violate this regulation, pupils may be expected to do likewise. Student government must be a community government that applies to all with equal force.

elsewhere. This creates pride and makes other pupils ambitious to succeed those in office.

It is advisable not to introduce any new plan too rapidly. We introduced student government gradually, putting it into effect the latter part of the school year. The following school year it went into effect about Thanksgiving Day and this year, for the first time, at the beginning of the year. Pupils became accustomed to it and were better prepared to assume their obligations.

One big problem of student government concerns the matter of disposing of teachers. Since teachers must not remain in their roll rooms if the rooms are under student government, some definite room must be set aside for them in order that pupils and others seeking to find them may do so without searching the entire building. If teachers remain in roll rooms pupils naturally look to them to supervise discipline and this defeats student govern-

ment. We cannot have divided responsibility. Student government works to the advantage of both the teachers and the pupils, however, since more time is made available for teachers without teachers being added to the system. Energy formally devoted to supervision and disciplinary matters may now be devoted to constructive school service.

Of course, we cannot expect any plan or any form of government to work perfectly in any organization. This system, however, has worked effectively and at the same time has provided wonderful opportunities for pupils to learn to assume responsibilities in their community. As pupils leave school they must assume their rôles in a civic organization and they cannot expect to have school teachers or policemen continually at their elbows to direct their actions. They must sooner or later learn to be responsible and no better time or opportunity presents itself than high school days.

Last year, the first in which student government prevailed throughout most of the year, the conduct of the pupils was as good as in previous years when all disciplinary problems had been handled through the office. The spirit and enthusiasm of the student body and the support and interest of the pupils in academic as well as in extra-curricular activities were the best displayed during the four years I had served as principal. The teachers were able to do better school work since they were not tied down hour after hour throughout the school year in the capacity of police officers supervising study halls and roll rooms but were allowed to devote their entire energy to their jobs.

A Successful System

The record achieved last year by the pupils under student government surpassed any previous record they had ever made. Furthermore, in competition with other schools in the state, these young men and women who were learning through active citizenship that the success of their community was in great measure their responsibility demonstrated a leadership in numerous lines of endeavor. During the school year 1929-30, these pupils won the following honors for their school: the state debating championship; the eastern Oregon football championship; four first places, two second places and one third place in the state music contest; first place in the eastern Oregon typing contest; one first place and one second place in the state division of the national chemical essay contest; second place in the state newspaper contest, with the editor of the school paper elected president of the State High School Press Association; superior rating (the highest possible) among high school yearbooks.

Successful teaching of citizenship—making a man and building a woman who will fit into our

social organization and promote the welfare of our society—is one of the most important tasks confronting the teaching profession to-day. A "living" citizenship demands just as practical a method of approach as the teaching of mechanical trades. We have the tools with which to work. Are we willing to meet the challenge?

Walden, N. Y., Publishes Interesting School Bulletin

A new contact bulletin, designed to bolster up a cooperative parent-school relationship, has been put into operation in the public schools of Walden, N. Y., this year. A mimeographed bulletin is being mailed to parents of junior and senior high school pupils from the superintendent's office.

The bulletin, entitled "Our School," is described as "A message to you from and about the Walden Public Schools." The first issue was released simultaneously with a report card period and the current reports were enclosed with the bulletin, a move that resulted in increased receptivity on the part of the parents. Other issues will follow. The exact frequency of issuance is still to be worked out, present plans calling for either six, ten or twelve annual issues, depending on whether the issues coincide with the six report periods, or whether the bulletin becomes a monthly and includes July and August issues.

The content of the first bulletin included an explanatory paragraph, entitled "Know Your School." Other paragraphs were: "Striking a Balance," (a written summarization of results in the state examinations over a period of years, illustrated by bar graphs); "Report Cards," (a brief treatment of the importance of the reports to parents); "A New Term," (material regarding individualized schedules and course of study planning for pupils); "A Big Business," (statistical data about school property values and expenditures).

These paragraphs were separated by two and three-line fillers, which were mostly news notes of general interest to parents. The bulletin is signed by the superintendent of schools, E. R. Van Kleeck. It was brief in length, running to two typewritten pages. Single spacing was used for the body of the material. Additional volume was attained by the use of elite type. Sheets were mimeographed on one side only.

Although written for parents, the bulletin was also mailed to a selected list of other citizens, including professional men and women, office holders, large owners of real property, board of education members and members of the teaching staff.

The Science of Floor Treatment

Methods of caring for school floors to preserve them against wear, to keep down dust and to improve their appearance are described in detail in this article

By CHARLES E. REEVES, Elmira College, Elmira, N. Y.

SCHOOL building floors are usually treated with oil or wax.¹ Other means of treating floors do not serve all of the purposes for which treatment is used, such as (1) preserving the floor against wear, (2) improving the appearance of the floor and (3) preventing dust from rising either when rooms are in use or during the process of sweeping.

Oil holds dust by its adhesive qualities, while wax, it is maintained, holds dust by its magnetic qualities. When floors are treated often enough, either wax or a good grade of oil will be satisfactory both as a preservative and as a means for keeping dust from rising. If either is used rightly it will also give as good an appearance to a floor as will be obtained by any other form of treatment.

How to Keep Dust From Rising

There can be little question as to the desirability of using some means to prevent dust from rising into the air of school buildings. The dust doubtless has an injurious effect upon the respiratory organs of the pupils breathing it. It also carries bacteria, some of which may be harmful. A number of tests have been made to determine the bacterial counts in schoolrooms that were oiled and in others that were unoled. Dr. John Lambert's report² may be cited as an example. He reports that gelatin plates were exposed for six minutes in classrooms where children were walking about. The plates showed 60 colonies of bacteria where the floors were oiled as compared to 270 colonies of bacteria where they were unoled. When plates were exposed for five minutes during the process of sweeping, the plates exposed in rooms having oiled floors showed 38 colonies of bacteria as compared to 456 colonies of bacteria on plates exposed in rooms having unoled floors. Such data indicate the need for some treatment that will hold dust to the floor until it can be removed.

School building floors will usually need to be oiled or waxed three times a year. The frequency will of course depend upon such factors as (1) the amount of use of the floors, (2) the kind of material of which the floors are composed, whether the wood is soft or hard, and the condition of wear, (3) the condition of the playgrounds and the streets, which determines largely the amount of dirt that will be tracked into the building and (4) the quality of the oil or wax used.

The only practicable times at which school floors can be oiled are during the summer, Christmas and Easter vacation periods. The two latter periods are, as a rule, none too long to enable janitors to clean and treat all floors of a building thoroughly. If waxing is the method of treatment used, floors may be treated at these periods or continually kept "touched up" with wax and polished in aisles and other places receiving much wear, during the time that the schools are in session.

Floors of corridors and stairs made of materials such as battleship linoleum are often oiled or waxed to preserve the material against wear and to improve their appearance. Because such floors do not readily absorb the material applied, they are usually treated more frequently. Old wood floors and soft wood floors will usually absorb oil more readily than new hardwood floors, so that they need treatment less frequently.

Wax Most Suitable for Hardwood Floors

A hardwood floor, such as maple, may be waxed more satisfactorily than one of soft wood. It will show a better color and may be given a higher polish than a floor of soft wood. Hardwood floors are also better for oiling, but since the pores of the wood will absorb less oil the need for the application of oil will be more frequent than for soft wood floors. Cement and terrazzo floors may be so soft that the materials produce fine dust under the grinding of children's shoes. Such floors should be treated with a permanent filler or hardener.

¹Reeves, C. E., and Ganders, H. S., *School Building Management*, chap. 9, Bureau of Publications, Teachers College, Columbia University.

²Lambert, John, *The Newer Methods for the Prevention of Dust in Schools*, "The Child," pp. 279-289, London, January, 1912.

A new floor as a rule loses its oil or wax more rapidly than an old one which has been previously treated so that the pores of the wood are filled. Wood floors should be smooth in order to produce a good appearance after a floor dressing has been applied and to facilitate the work of spreading the dressing. If they are rough they should be sand-papered or scraped until they are smooth before the dressing is applied.

How to Apply Oil

The results, so far as appearance is concerned, of waxing or oiling floors will be determined largely by their condition of cleanliness. Janitors sometimes do not clean old oil from floors because they wish to "save the old oil." Much of the oil thus saved is mixed with dirt and hardened on the floor. Such a procedure will save oil because the new oil cannot soak into the floor at those places where the old oil and dirt have not been worn off or removed by cleaning. But, considering the relatively small cost of even the better floor oil, it would be far better, from the standpoint of the appearance of the floors, if such gummy oil and dirt were not saved. If the investigation is carried further, the desire of janitors to save oil may be found to be intensified by the possibility of saving themselves undue scrubbing labor if no electric floor machine has been provided. The best appearing floors are invariably those that have been thoroughly scrubbed prior to the application of the oil, new floors that have not had an opportunity to accumulate the dirt and oil combination on their surfaces and in the wood pores or floors that have been treated with a high grade of oil and cleanser combined, which will not collect dirt.

Treating Floors in Rooms With Furniture

Movable furniture will be advantageous from the standpoints of oiling and waxing. Even stationary furniture should be removed for the cleaning and oiling process during the summer vacation. Because of the time required to remove and replace stationary furniture it is probably impracticable to attempt to remove it during the Christmas and Easter vacation periods. When furniture remains in a room during the process of oiling the oil should not be distributed to the portions of the floor close to desk legs or baseboards, because surplus oil is likely to become concentrated at such places where it can neither be spread nor removed.

The usual method of oiling floors is for the janitor to dip a cord mop into a pail of oil and apply it to the floor, rubbing the floor with the same oil-soaked mop with which the oil is applied. The results are that an excess supply of oil, much of which cannot be absorbed by the wood, is applied,

pools of unabsorbed oil remain at places where the oil soaked mop is first applied to the floor, and much oil remains around desk legs and near baseboards. The application of excess oil by such means soon forms a black, viscous covering for the floor, or parts of it, and an untidy and splotchy appearance is the result.

The oil spray is much better in that it is possible to avoid the application of excess oil that cannot be wiped up. Where the spray is used, less than one-half as much oil may be applied to floors and less than one-fourth as much time will be required for the work, because there is no necessity for rubbing the oil. After all, oil cannot be rubbed into the wood. The only reason for rubbing, when oil is applied, is to spread the oil to places where it may be absorbed by the wood. The surplus oil should be removed. This work is eliminated if a spray is used.

If mops are used they should never be dipped into a pail of oil and applied to the floor. Oil should be applied to the mop by means of a water sprinkler. A dry mop can then be used to spread the oil. The dry mop should be changed when it becomes filled with oil.

Methods of Oiling and Waxing

Regardless of the method used, great care should be taken to keep oil away from desk legs and baseboards. These spaces are not used, and if they are oiled they will soon turn black since they hold the dust which is not worn away by use. After the floor has been swept a few times, sufficient oil will reach the space around desk legs and near baseboards to give the floor an appearance of being evenly oiled.

If floors are waxed they must be thoroughly cleaned before the first application of wax. After that they will never need to be scrubbed, but merely wiped with a mop treated with a special wax cleaner or with a cloth dampened with water applied to the surface of the wax. Dirt will not penetrate wax. The only problem is to keep the floors well waxed and polished and to remove the dirt from the surface. For the work of waxing and polishing, an electric floor machine will be better than hand methods of performing the work. The greater weight, speed and friction produced by the revolving brush of the machine will drive the wax into the pores of the wood and burnish the surface until it shines. Floors should be polished by such mechanical means once or twice a month in order to keep them well polished and to distribute the wax evenly to the places where floors receive most wear. Dirt must not be allowed to accumulate on the surface of waxed floors. One of the best means for cleaning waxed floors is by

means of the dry floor mop, properly treated with cedar oil.

When it is applied in sufficient quantities and with sufficient frequency, a good grade of mineral oil and kerosene, or kerosene alone, will form a hard, transparent coating that will protect wood from the deleterious effects of water and chemicals. Floors treated in this way can even be polished to some extent. The kerosene mixed with the oil, or kerosene alone, will cut grease and serve to clean the floor as well as to preserve it.

Kerosene as a Cleaner

Kerosene and the better floor oils are good preservatives because they contain paraffin. The poorer grades of oil contain vaselin which oxidizes and turns black. The use of kerosene is one of the best means for removing old oil from a floor. Since both are distillates of crude petroleum, they will readily reunite when brought into contact. This loosens the oil so it may easily be removed.

Olsen¹ gives the following estimates for the amount and cost of oil and wax for floors:

Standard floor oil. One gallon covers 400 square feet; cost per gallon, \$.857; number of coats required, 1; cost per square foot, \$.0021.

Standard floor wax. One pound covers 300 square feet; cost per pound, \$.36; number of coats required, 2; cost per square foot, \$.0024.

Olsen's estimate for the amount of oil required is too high even under the ordinary method and conditions of oiling, and much too high if the oiling is properly performed. A gallon of oil costing 85 cents will cover from 1,200 to 1,500 square feet if it is properly applied with a spray. His estimate of the amount required would not be used even with the poorest method of application. The cost of oil will vary in different places, but the price he quotes should purchase a good quality in most places. His estimate for the amount of wax required appears to be too low for a first application or too high for rewaxing. He is doubtless making his estimate for a first application, since he uses two coats of wax as the basis for his computation. Olsen's figures do not give an accurate representation of the comparative cost of wax and oil. Wax is much more costly, but it may well be worth the extra cost.

Womrath² estimates that, for the first application, one gallon of wax, properly applied, will cover 155 square feet of floor space. This would be the equivalent of a little more than four gallons per classroom of the usual size. Later applications, of course, would require much less.

By the inefficient methods of oiling generally used, an average of four quarts of oil per classroom is generally applied. This is too much to obtain good results. Half as much will be sufficient if a good quality of oil is used and if the oil is applied with a spray.

Linseed oil is sometimes used and will form a coating even harder than wax. Raw linseed oil forms a dark, hard coat, while boiled linseed oil forms a hard coat of a lighter color. Linseed oil will not take a high polish and will not hold dust so well as mineral oil or wax. It is a good preservative, however, and will give a good appearance to the floor. Its greatest defect is that it cannot be removed readily except by scraping or sanding with steel wool or sandpaper in the brush block of a scrubbing machine. Mineral oil is better as a means of holding dust. Only high grade oil, containing paraffin, but no vaselin, should be used on school building floors. Kerosene is an excellent floor oil as well as a cleanser. Only a good grade of kerosene that has been deodorized by the removal of all sulphur should be used. After evaporation the mineral oil and paraffin remain in the pores of the wood and on the surface. The use of kerosene eliminates the necessity for scrubbing for it serves as a cleanser as well as a floor treatment.

Summary

The preceding paragraphs, then, may be summarized as follows:

1. Floors are treated to keep dust from rising, to preserve the floor against wear and the effects of water and to improve the appearance of the floor.
2. Floors should be oiled three times a year, at vacation periods. If they are waxed and polished from week to week at places receiving most wear, they will not need to be scrubbed or rewaxed at regular periods.
3. Waxed floors and floors treated with a high grade of floor oil may be cleaned with a special cleanser consisting of cedar oil, or with a dampened cloth.
4. The spray is better than the mop for oiling floors because the application of surplus oil may be avoided and less oil used, and because less time will be required for the work.
5. In oiling, oil should be kept from floor space around desk legs and near baseboards because of the difficulty of removing surplus oil and because such floor space is not used. This may be accomplished as far as space next to the baseboard is concerned by laying a six-inch board along the wall during the process of oiling, thus protecting the baseboard.

¹Olsen, M. S., *School Housekeeping*, the American School Board Journal, vol. 74, No. 2, February, 1927, p. 46.

²Womrath, George F., *School Janitorial and Engineering Service*, the American School Board Journal, vol. 71, No. 2, August, 1925, p. 68.

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Editorials

Legislators as Educators

AS THESE lines are being written the legislatures in a number of states are getting ready to adjourn. Most of them have enacted legislation affecting public education in schools and colleges. Never has so much attention been given to education by legislatures heretofore as has been given during the 1931 session. One thing is certain—education is looming large in the minds of legislators. Why? Partly because it is costly, and partly because it is a powerful force in determining social welfare and political developments.

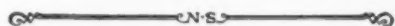
There has never been another session of state legislatures when the governors of so many states have discussed educational problems in detail, principally for the purpose of securing economy, but also for the purpose of calling attention to the tremendous rôle that is being played by public education in shaping social, political and industrial ideals and activities in our country. All this will undoubtedly prove beneficial to education in the end, although at the moment it is disturbing, or at least disquieting, to many of us.

Legislatures have been busy this year in one way that is fraught with danger. They have meddled with courses of study and with methods of instruction. They have legislated subjects into the curriculum of the elementary school and especially of the secondary school and the university. If they have not actually cast subjects out of courses of study, they have at least denounced subjects they think are of slight value to-day. There is no denying the fact that these legislatures have tackled complicated problems that can be solved only by expert knowledge, which legislators as a rule do not possess.

The debates and many of the discussions have brought out this point: Graduates of public high schools and of state universities have been elected to the legislatures in their respective states. When questions of education are up for consideration, these graduates recall their experiences in the schools and universities. They did not get any benefit whatever from certain subjects they were required to pursue. They brought over from their school and university days remembrances of dull and ineffective methods of instruction. Also, since they have gone out into the world, they have dis-

covered certain defects in their education that ought to have been remedied while they were in school and college. On the basis of their personal experience, they have proposed legislation that would cast out of courses of study subjects that were of no interest or value to them, and that would introduce new subjects which they think would be of value to them now.

Many educators condemn legislators who meddle with public education. But some good may come from legislative interference with educational activities, provided those who are engaged in education are given an opportunity to show reasons why proposals made by legislators should or should not be carried into effect. Doubtless benefits will accrue to education from the legislative activity of graduates of the schools and universities. It cannot be all bad when a man who has been through the whole educational régime reviews his experience and attempts to correct what he regards as defects and deficiencies. When the legislator turns educator, however, those who are devoting themselves to education should be given an opportunity to examine all proposals critically and to point out their fallacies or inadequacies if they seem to be unsound.



Much Heat But Not Much Light

DENUNCIATION is the easiest way to dispose of any perplexing problem. Also, it meets with the approval of the populace. It is a trait of human nature to enjoy condemnation of any movement or institution to which the public cannot adjust itself harmoniously or which it cannot quite understand. Destructive criticism will awaken applause much more easily and generally than constructive progress. There is something in most of us that leads us to esteem the past more highly than the present. We would rather slip backward than go forward, probably because the one is easier and more comfortable than the other.

These reflections are incited by the reading of an address delivered recently at Ohio State University by Prof. Herbert M. Peteat, Wake Forest College, Wake Forest, N. C. He condemned "the bland complacency with which so-called experts enunciate new theories every other day, and the indiscriminating and hungry avidity with which these theories are swallowed, hook, line and sinker, by school men and women all over the country." "The tragedy of the situation," he said, "lies in the fact that the public is either too lazy or too ignorant to distinguish between sheep and goats and, further, that the strangle hold which the new

pedagogy has secured on all our educational processes makes it possible for the goats, as well as for the sheep, to guide our children's destinies. We have enwrapped our schools and their faculties with mile after mile of red tape, thereby, of course, seriously compromising teaching efficiency; we have added cogs here, grease cups there, wheels within wheels yonder. It is my profound and mature conviction, based upon nearly twenty years of observation and experience, that the young men and women of college age are not nearly so well educated to-day as they were fifteen years ago, in spite of all our complicated, humming machinery."

Professor Peteat has supporters in his castigation of modern education. Discontented persons must be in the minority, however, because otherwise we should be doing such work in the schools to-day as was done in them twenty-five years ago.

The chief objection to be urged against Professor Peteat's discussion of contemporary education is that nobody can tell what he thinks is wrong with it. The curriculum and methods of teaching have changed greatly in two decades, and the educational program has become complicated. But what topics that are taught in the schools now would Professor Peteat eliminate? What subjects that have been abandoned in whole or in part would he restore? Would he teach the same topics to all pupils throughout the elementary schools, the secondary school and the college? Would he go back to book learning as the essential process in the education of a child? Would he restore the lock-step in education? What would he do if he were given autocratic power in dealing with the educational work he denounces? No one can tell, because he has made no concrete suggestion.

He says that young persons coming to college were better educated twenty years ago than they are to-day. Suppose this is true; the fault may not lie with the schools; it may lie with the compulsory education program, or with social changes that have completely transformed the environments of children to-day compared with those of twenty years ago. Of course, when we say that eighteen-year-old children were better educated twenty years ago than they are to-day, we voice a proposition that is extremely complex, one that would be denied probably by the vast majority of persons who are competent to form an intelligent opinion. It might be true that young persons were better trained to take up formal college work twenty years ago than they are to-day, and it still might be true that they are better educated to-day than they were then, because they have a better understanding of the world in which they live and can adjust themselves more effectively thereto.

Unless Professor Peteat and those who side

with him in his hostility to present day education can make some concrete proposals and can produce evidence in corroboration of their denunciatory statements, their assertions cannot carry conviction, although they may be disturbing or at least disquieting to a good many earnest persons who are inclined by temperament to cling to traditional ways of doing things and who are not able to keep abreast of the investigations that lie at the bottom of the rapid changes taking place in the curricula and methods of teaching in the schools of all grades.

When a Teacher Becomes Ill, Who Shall Take Her Place?

CONSIDER the substitute teacher! She has no regular appointment; she does not know at night where she will be called for service in the morning; if she is substituting in an elementary school she must be ready at a moment's notice to conduct classes in any grade; if she is a substitute teacher in the high school she must take up the subjects she can teach at any point at which the regular teacher is forced to abandon them for a time; she must step into a class and go on with the work without having a word of introduction to the pupils or without knowing anything about them except that they are in need of someone to stop a gap. How can any mortal person meet all these requirements?

How is the staff of substitutes recruited? What qualities and abilities are required in the substitute teacher? What salary is provided for her? What privileges in the way of permanent tenure are accorded her? In some places the substitute teacher is engaged for full time, but in most places she is engaged for part time only. In the latter cases she engages in other work than teaching when her services are not required in the classroom. Consequently her interests are divided between teaching and some other occupation, which is necessary in order that she may gain adequate income. In most of the communities investigated, the substitute teacher is not assured of a position from one year to another. She is not assured even of any specified income while she is serving as a substitute. She is paid a daily wage whenever she is called upon. She earns more during January, February and March than during any other period in the school year. In May and June her income is apt to be very slight if she depends upon payment by the day. It is also comparatively slight during the first three months of the school year.

What type of teacher is willing to serve under

these conditions? The strongest teacher will not submit to such an irregular and unsatisfactory mode of life. Consequently teachers of inferior ability or of inferior personality, or both, are found on the staff of substitute teachers. Of course, there are exceptions but they do not constitute a large proportion of the entire substitute teacher staff. This is most unfortunate. The substitute teacher should be even more capable and should possess more impressive and commanding personal qualities than the regular teacher. When the substitute teacher comes in, the pupils, no matter how decent and well behaved they may ordinarily be, are ready to engage in deviltry of a more or less riotous character. The only type of substitute teacher who can hold youngsters in check when their regular teacher cannot shepherd them is one whose personal traits are so impressive that pupils are restrained in their urge to engage in revelry as a form of relaxation from periods of restraint.

Teachers who have been away from their classes for several days testify that when they returned they found the good habits the pupils had acquired had been largely lost and it was necessary to begin to train them again in necessary school-room routine. In a school in which pupils are almost completely self-governing, a substitute teacher of average or even inferior traits and abilities may carry on for a week or two without the pupils taking advantage of her, but this is an ideal situation that is not often realized.

What is the solution of the problem? Substitute teachers must be engaged for full time. They must possess the highest qualifications, both intellectual, temperamental, physical and personal. They must be paid adequate salaries so that they can devote all their time and energy to keeping themselves ready to step into any classroom and go on with the work where the regular teacher has left it. The substitute teacher must have no worry about tenure of office or maintenance. During the months when regular teachers have optimum health, the substitute teacher should cooperate in dealing with individual pupils, either the unusually backward or the unusually advanced, according to their needs. There is always enough work to do for a staff of full-time, high-grade substitute teachers. Investigations have shown that in some communities this plan is already in operation; the larger the city the easier it is to adopt the plan. In a small community in which funds are strictly limited, it is difficult to provide an adequate number of full-time capable substitute teachers. Every effort ought to be made, however, to prevent a backward step in the intellectual work and the behavior of pupils in a classroom when the regular teacher is incapacitated for a limited period.

Happy to Say—By WILLIAM McANDREW

BY NEXT September the number of newspapers hailing the opening of school with a sarcastic paragraph on the editorial page will be smaller than ever. The metropolitan dailies have quit doing it.

A COMPANY of Chicago teachers, seven years ago, organized a quiet little committee and asked the leading American journals to check up on the old idea that children hate to go back to school after the long vacation.

THE *Chicago Daily News* sent out, on school opening day, a troop of reporters and camera men to waylay the children: "Are you glad to get back in school?" The answers amazed the editors.

FOR years caricaturists and jokemen have been imagining that children resent the ending of vacation and hate their teachers and dislike their school. This is what A. Jackson would call tommyrot.

EVERY editor I ever questioned says he remembers himself going back to school happily at the summer's end whether as a small boy, a high-schooler or a collegian. You did the same. And your father and mother did likewise.

WHENCE this myth of crawling like snail unwillingly to school? It arises out of what we sociologissimists know as smartaleckism. Select an accepted belief, as trust in the excellence of Washington or Lincoln or womankind. Ridicule it, sneer at it, and enough people will take notice to get your name in print.

WE DON'T know who designed the metal soldier boy of 1861 in the grassy triangle where Main Street crosses Putnam and Hale, but the whole town is aware of a high school class of '32 through mussy daubs of yellow paint on this unknown soldier.

THE Greeks, under sunny skies, in a land where sea and mountain made every day a dream of beauty, were the gladdest of the ancients. It would be a commonplace to sing to Greeks of the joy of life.

BUT put into your poems that life is a curse, that a man's worst misfortune is that of being

born, say it with the artistry of genius and you win the fame of an Aeschylus, a Sophocles, a Euripides.

IT IS more noticeable to be different than to be right.

RIDICULING schools and teachers can be done with brains and skill but there is hardly any flavor of truth about it.

I HAVE known 1,044 teachers pretty well during my time. Of them, six seemed to me and others contemptible, selfish and soul-wizened enough to make children justified in not wishing to come to school.

SIX out of more than a thousand is a smaller number of contemptibles than I found among other people.

IF YOU make it a point with your editor that the public education costs the most money and employs the best patterns and companions for children, you will help him see the absurdity of continuing an old insult which never was based on truth. It is, in effect, a sort of treason against his town, his state and his country.

IT IS worth while to call on the editor about four days before school opens, to give him an idea of your educational prospectus for the year and to tell him how pleasant it is for the whole town to read a cheerful editorial on the great march of the nation of to-morrow into its schoolhouses of to-day.

JOHN WITHERS, one of the deans of New York University, told an audience, recently, that I said to a Chicago Normal School class which rose as I entered the room, "Sit down, my dears. I'm not the Star Spangled Banner."

Wrong, John. What I said was this: "As John Walsh once remarked, etc."

Walsh was the wittiest school man I ever knew. He said to one of his laziest New York principals, "Jim, you ought to be an ocean announcer."

"What is that, Mr. Walsh?"

"As the liner leaves the wharf, you say, 'Next stop, Liverpool,' and then you rest ten days."

ANOTHER Walshism: "To make winter pass quickly, sign a note due the first of March."

Equalizing Rural and Urban Education Facilities

By ERNEST BURNHAM, Department of Rural Education, State Teachers College, Kalamazoo, Mich.

This department of rural education is conducted by Helen Heffernan, chief, division of rural education, state department of education for California, Sacramento, and president, department of rural education, National Education Association.

FINANCING public education is an outstanding economic question of the times. Inquiry about it is insistent in the U. S. Office of Education, in state departments of education, in state legislatures, in university and other college departments of education, in county, city and district school administration and in voluntary lay and professional groups throughout the country.

The additional financial resources desperately needed in many places in public education and nowhere more than in the elementary and secondary schools in the open country, hamlet and village rural districts, will presently be forthcoming. This great achievement is already well advanced in a few states. It is safe to believe that what has already been done by some states will not much longer baffle the educational statesmen in others.

Proper public education facilities, granting environmental differences, are fundamentally the same in the city and the country. These facilities are instrumental and personal. Adequate financing is absolutely essential in both respects. Effecting a proper balance between the investments in buildings and equipment on the one hand and the human agents on the other hand is the conundrum that confronts lay and professional authorities in public education, when financial resources are not adequate. A few illustrations will help make this clear.

How Shall the Money Be Spent?

District 5 of a certain township has an available budget of \$1,125 for the current year. The board must decide whether it will hire a teacher for \$900 and invest the balance in the physical improvements so obviously needed, or give the whole \$1,125 and so get a better teacher. This district can finance either a better physical plant or a better teacher. The better teacher is chosen.

District 2 of another township employs a thoroughly prepared and devoted teacher. During the year she asks repeatedly for a sanitary and properly heated and lighted schoolroom. The following year the district must decide whether an increase in salary shall be given and this teacher retained or a beginning stranger employed and the margin of the total budget of \$1,350 be used for the greatly needed physical improvements. In this case the decision is put up to the successful teacher, who may have all of the \$1,350 as salary or may spend as much of it as she volunteers to improve the building. This unjust challenge was accepted by the teacher and more than \$300 of her salary went into the realization of her ideals of better living and working conditions for the children and herself.

"Proper" Rural Facilities

In these simple rural situations the word "proper" takes on a new meaning. Proper facilities in public education can be found only where the instrumental and the personal investments are adequate in amount and are justly proportioned.

In a village or consolidated school the same problem exists, with the additional items of high school and transportation. These are expensive items because of the initial equipment of buildings and busses and the continuous upkeep of laboratory and transportation equipment. The higher salaries, especially of high school teachers, add to the expense. Here, however, some of the states will give special financial aid to localities already financially able to help themselves up to specified minimum standards, and if the locality has further resources available, both state and Federal governments will further supplement the local budget.

Nothing can be gained by depreciating what is

being done by state and Federal subsidies, and no such depreciation is here intended. But are not the most helpless rural communities in many instances receiving the least help from the present state and Federal procedure? How can citizens in districts too poor to provide even minimum expenditures for public education bear to see their state and in many instances their national government annually add to the education budgets of their more well-to-do neighbors? Again, how can the essential balance in public education be kept when liberal subsidies are offered for the introduction of certain subjects in the curriculum while other subjects equally essential are not so favored?

An Unequal Distribution of Funds

Let us look briefly at two true pictures. A consolidated school is organized from three small schools in a restricted area but with a relatively large population engaged in intensive truck farming. A total valuation of less than \$800,000 is available for local taxation. State help is given for transportation and because specified subjects are put into the high school. On account of initial building expenses and low valuation for taxes the requirements that make possible Federal aid are beyond the reach of this school. In the same county a whole township where large scale general farming is done and therefore the population is relatively low establishes a consolidated school. Here there are fewer children and fewer teachers and it is necessary to spend more than the former district for one item only—transportation. Here the valuation for purposes of local taxation is about \$2,500,000. This district is able to demand both state and Federal aid. How do the thrifty and patriotic American citizens who live in the first district feel about special financial aid in education being granted to their much wealthier neighbor and withheld from them? Do they believe that this is a proper way to facilitate public education?

In county education offices throughout the country there are to be found provisions for educational facilities ranging all the way from the most meager to the most complete. How may adequate service be established and financed in regions beyond the great metropolitan areas and in the few states where local resources in money and leadership plus adequate state direction and financing have already brought about a proper situation?

The acceptance of primary responsibility for public education by the state and the personification of this obligation in a state superintendent or commissioner of education is thoroughly established. The states put varying valuations on the importance of this office as expressed in salaries paid and in the means resorted to in filling it. How-

ever, this office affords conservative and constructive leadership in American education. To it the public looks for direction and control in safeguarding constitutional and statutory state provisions, for the exemplification of scholarship and statesmanship in the maximum use of institutional and personal public education service and for justice in making every child citizen of the state as nearly as possible an equal sharer in the state's educational benefits.

A state superintendent who is really a vicarious parent for every child citizen of the state is the paramount need in public education. As a more advanced educational leadership is generally provided in urban than in rural education, the state superintendent is the most important figure in rural education.

If the person who holds the office of state superintendent has general intellectual and social culture, broad knowledge of public education and a deep sense of humanity and justice, then the first essential for a proper rural education is assured. Such a state superintendent will obtain for his departmental staff the best men and women within the reach of his annual budget, though he may have to sacrifice numbers to quality. He will put into use every instrumental facility known in modern administrative service. He will invoke the results of research by the U. S. Office of Education and the national and state education associations, the economic and social studies of his state's experimental stations and the faculty and graduate studies emanating from higher institutions, as well as local studies that may be applied all over the state. To do all this he will require the help of at least one person versed in the financial and instrumental aspects and at least one versed in the personnel side of public education, who in addition to preparation, experience and absorbing interest in the work possess real intellectual distinction.

What a Real Leader Can Do

When a great state leader has definitely determined just what the public education service in his state is, he will want to do two things: first, to make the public aware of the significant facts as rapidly as possible and second to bring to bear every legal and moral force within his power to correct inequalities. For the first he will develop training and resourcefulness in one or more members of his staff. For the second he will make clear to his department and to school executives that after the collection of a statewide tax for the service of public education, the public money must not be permitted to be used disproportionately for the advantage of any group in the population.

For example, since administrative mechanism

and personal leadership are more highly developed in urban than in rural education, the ease of adapting state institutional service to urban conditions will, if not strongly controlled by institutional executives, result in minimizing the service to rural people. This condition is generally true at present. An honest and fearless state leader will make it plain to the executives of his higher institutions that such a condition will be considered a proof of administrative inefficiency that will not be long endured.

Some Outstanding Examples of Negligence

A story or two will reveal existing conditions that are present in varying degrees in many state institutions of higher learning, conditions that are important because they influence the general public and in particular because from the special departments of these institutions are enlisted the most trusted leaders in the intellectual, economic and social organizations of the state.

A gifted young leader in public education who had recently earned the highest graduate degree in the school of education of his state university, in discussing a practical and constructive problem in rural education prefaced his remarks by the statement that of course he had not especially studied rural education. Not only this confession of ignorance but the indifferent attitude with which he made the confession would shock any honest state superintendent. A member of the school of education faculty in the same state university on being asked why some specific instruction in rural education was not included in the offering of his college said, "The dean is so pre-occupied by his regular work that he finds no time to devote to rural education." Could any work be more regular or proper for the college of education in a state where a full third of the population live in open country, hamlet and small village communities than instruction, especially to graduate students, relative to the public school and adult education facilities provided for this state's rural population?

State colleges of agriculture and mechanics afford the chief source of vocational education for rural people, and these colleges exercise a double force in rural education through their preparation of vocational teachers for secondary schools and their direction of extension work through county agents and the 4-H clubs. In both the campus and the extension service of these colleges, the facilities utilized become more adequate as the students pursue their specialized vocational instruction against a background of general intellectual and social culture. This might well be a subject of inquiry by the state superintendent.

To safeguard the health and comfort of the children certain minimum requirements for the facilities of public schools may well be set up by state authority. It will be necessary for persons of understanding and tact on the staff of the state department to supervise the enforcement of these requirements and to keep them within reach of local resources unless there is supplementary state aid. In a local hearing during the rural school survey in Pennsylvania in the fall of 1924 a school director said, "It is all right for the state to direct us to maintain specified minimum standards in our public school service, but these state standards must not outrun our ability to finance them, unless the state provides sufficient money to supplement local resources." This is the crux of the whole problem of minimum requirements in instrumental facilities.

To say that teachers may begin or continue their service in the public schools upon the completion of specified minimum preparation will probably force up standards, but such regulations may possibly result in cutting down the preparation that some bright and ambitious young persons would otherwise make. To continue to prescribe minimum requirements for the enlistment of the teaching personnel one day longer than economic and social conditions make it necessary is an unforgivable sin in education.

Training Rural Teachers

The responsibility of the state superintendent to the state public school teachers is sure to force him to acquire an accurate knowledge of the quantity, the quality and the distribution of the service of the state teachers' colleges as well as of any local teacher preparing facilities that may be temporarily utilized until minimum standards outgrow their economic and educational range. Here again the demand for teachers in the urban systems will force the less authoritative demand of the county systems into the background unless there is persistent and effective administrative control to the contrary. Some of this urbanization of state institutions under the present conditions of general appreciation of urban life and of widespread depreciation of country life is likely to occur in spite of the strongest administrative attempt to distribute the teachers college service with honesty and justice to all the children of the state.

In attempts to provide equally well prepared teachers for country and for city children there will be obstacles that are beyond the reach of the teachers' college executives. These obstacles afford points of attack for the state administrative leadership. This attack may be made by means of a fearless statement of the comparative facts, made

SELECTING FINISHED FLOORING MATERIALS for SCHOOLS

Relative Importance of Various Characteristics of Finished Flooring Materials Governing Their Use in Twenty Divisions of the School Plan

Amount of attention to be given each characteristic is indicated by points in 100. Thus, the properties of predominant importance rate 100; secondary properties by lower figures.

Type of Space	Appearance	Durability	Disinfectability	Resistance to Acids and Alkalis	Resistance to Abrasion	Cost	Ease of Repair
Entrance Vestibules and Lobbies	80	40	100	90	60	0	0 90
Stairways or Ramps	50	40	100	90	80	60	0 90
Corridors	90	40	90	90	100	80	0 90
Administration Offices	100	30	70	70	100	80	0 60
Library	100	20	60	60	100	80	0 50
Assembly Hall	100	40	90	70	80	60	0 80
Class Rooms	80	100	100	90	80	90	10 70
Kindergarten	80	100	70	90	80	100	50 40
Music Department	90	30	60	50	100	80	0 40
Physics Laboratory	40	100	80	90	50	70	80 70
Chemical Laboratory	40	100	80	90	50	70	100 80
Gen'l Science and Biology Labs.	40	100	80	90	60	60	90 70
Commercial Department	50	80	80	70	70	70	10 70
Drawing	80	70	80	90	90	100	30 40
Industrial Arts	10	70	100	90	80	80	70 60

PRACTICAL USE OF SEALEX FLOORS IN SCHOOLS

The Logical Allocation of Various Types of Sealex Floors in Twenty Divisions of the School Plan

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B—Optimal Choice

C—Alternate for Maximum Economy
Blank—Other Materials

Type of Space	Sealex Resilient Type (Sheet or Plank)	Sealex Linoleum	Sealex Cork Floor with Resilient Underlayment	Sealex Rubber Floor	Sealex Vinyl Floor	Sealex Cork Floor
Entrance Vestibules and Lobbies	A	C	C	B		
Stairways or Ramps	B	A				
Corridors	B	A	B	B		
Administration Offices	A	C	C	B	B	A B
Library	B	C	B	B	C	A B
Assembly Hall	B	A	A		A	
Class Rooms	B	A	B		A	
Kindergarten	A	A	A	B	A	B
Music Department	B	A	A		A	B B
Physics Laboratory		A	B		B	
Chemical Laboratory						
Gen'l Science and Biology Labs.		A	B		B	
Commercial Department	B	A	B		B	
Drawing	B	A	A		B	B
Industrial Arts						
Home Economics	A	C	C	B	B	
Cafeteria	A	C	C		B	
Physical Education—Gymnasium		A	B		B	B
Rest and Medical Rooms	A	A	A		B	

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increasingly clear in the public mind by reiteration, until social control will enforce equalization. On the other hand the complacency of minor progress may satisfy a mediocre leadership and perpetuate the present fraud of inadequately prepared, supervised and administered personnel in rural education.

The foregoing paragraphs have been written with a full knowledge of the following facts, which are the most authoritative now available. In rural elementary and high schools are found 53 per cent of the pupils and 58 per cent of the teachers of the United States. There are 197,957 rural schools in the country. Of this number 161,531 are one-teacher schools; 20,135 are two-teacher schools, and 16,251 are village and consolidated schools.

Granted that proper educational requirements, with admitted environmental differences in organization and curriculum, are fundamentally the same in rural and urban life, is it not highly improper that the average length of the school term for rural children is 156 days and for urban children 183 days; that the total per pupil cost on average daily attendance for rural children is \$75.01 and for urban children \$129.82; that the average value of school property per pupil enrolled for rural children is \$99 and for urban children \$299, and that the average salary of all teachers, supervisors and principals for rural children is \$855 and for urban children \$1,878?

These national averages when reduced to state units show the more progressive states approaching much nearer to comparative justice in equalizing the public education service to rural and urban children. However, can any informed and thinking citizen doubt, when looking at the situation as presented in this discussion, that intelligent and tireless attack is in order? Can there be any doubt in the mind of the United States Commissioner of Education or in the minds of state and county superintendents of education, who represent the child citizens' main social and executive safeguards against the fraud of inequality in public education facilities, can there be any doubt or hesitation upon the part of these responsible executives that every resource within their power should be invoked for effective equalization?

Equalization of Funds Is Needed

This nation needs an integrating and clarifying service upon the part of the Office of Education to make this problem plain to the whole public. This is of vital importance to ensure local and personal participation in citizenship, and it is, if possible, of even greater importance in keeping the nation aware of the inescapable interdependence of city and country.

Proper facilities for rural education demand state equalization funds adequate to the need, distributed where the need is without reference to the promotion of special features in either organization or curriculum. The place to promote advanced ideas regarding organization and subject matter is in the minds of the people, not in their pockets. Proper facilities in rural education demand adequate personnel in administration, supervision and teaching equal to the best to be found anywhere in public education. These two great endowments of rural education, the instrumental and the personal, are inextricably linked together.

What Education Costs for the City Child

Sixty cents, the price of a pound of candy or a single golf ball, buys one day's education for a child in the average city public school.

This fact is disclosed by the figures presented in "Per Capita Costs in City Schools," a biennial study prepared by the Office of Education, Department of the Interior. Statistics from a representative group of American cities show that the total average annual cost per child for teachers' services for nine months, for heat, janitor service and, in most instances, school supplies, books and library facilities, is \$108.87.

Since instruction costs, which include teachers' salaries, books and the library, make up three-fourths of total school costs, the city child gets the service of trained teachers and useful textbooks for approximately 47 cents per day or 8 cents an hour.

Subjects That Are Taught When the Law Steps in

A wide variety of subjects are now required specifically by law to be taught in the public schools of a number of states, Mina M. Langvick, senior specialist in elementary school curriculum, points out in a survey on state courses of study just published by the Office of Education.

Direct legislation now covers thirty-six subjects ranging from Bible reading to the study of science and from thrift to prohibition, the study discloses. More than 300 laws relate to nationalism.

The teaching of the effects of narcotics and intoxicating liquor is now mandatory in forty-eight states, while eighteen have laws setting aside one day for consideration of temperance. The constitution must be taught in thirty-seven states.

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Schoolhouse Planning:

Planning the Ultimate School Plant

Possible future requirements, the disposition of the present plant, the choice of sites and the determination of the rate of achievement are to be discussed in this new series of articles

By ARTHUR B. MOEHLMAN, Professor of School Administration and Supervision, School of Education, University of Michigan

THIS series of studies upon the development of the public school plant program has been concerned so far with the development of the educational policies, the social and economic survey and the appraisal of the existing plant in terms of these data. The next four articles will discuss the planning of the new physical plant and will include a consideration of: (1) the possible future school plant requirements; (2) the best disposition of the present plant; (3) the best location of centers for immediate or future needs; (4) the determination of the rate of achievement or the annual plant program.

As a result of the appraisal of the existing plant, the superintendent should have a clear-cut picture of the general problem of future needs and the base upon which he may build. The study of the current plant has supplied him with a classification of the existing possibilities of: (a) units that will satisfactorily fit into the future plant without change; (b) units that will be satisfactory if the site, the plant or both, are enlarged or remodeled; (c) units that will not form a part of the future plant but that may be allowed to exist for a number of years or through their economic life; (d) units that must be abandoned as soon as it is physically and financially possible to do so.

Possible Future Requirements

The finished plant should be an interpretation of existing and proposed educational policies and needs as developed through survey. The first consideration is therefore the extent or scope of these policies. Let us assume that the seven-three-three plan has been adopted. It is immediately obvious that seven-year elementary schools, three-year junior high schools and three-year senior high schools must be provided. The adoption of the extent of organization, coupled with the desired size and spacing of units in the elementary and secondary divisions, will point to the type and size

of the sites required, at a ratio of sixteen-four-one.

The study of the extent of organization also gives the range of age groups to be included in the educational program. Earlier in the survey the probable future growth of the community was determined and the relationship between the school census and the total population determined. At this time consideration of potential holding power, extent of organization, the relation of age spread to organization in terms of acceleration and retardation, provide a basis for the probable future amount of service required.

Determining Organization Policies

The earlier analysis of population trends with respect to land occupancy will indicate the places that must be cared for immediately and those whose needs lie in the future. At this point in the survey, all of the basic information considered and gathered earlier may be brought together and given careful attention. The geographical, economic and social tabulation of these data into maps will supply the means through which these educational policies may be applied.

The adopted policies will also indicate the character of the organization. The type selected for illustration is the seven-three-three. The units possible of salvage in the existing plant have been carefully studied with respect to their possible fit into the new plan. The application of the organization policies to the tabulated and mapped data will offer a means for laying out the ultimate school districts. Organization type, together with desirable size, territorial growth, probable land use and population spread will make it relatively easy to determine the number of each type of facility to be provided.

A survey of the existing instructional program and its ascertainable extensions in terms of adopted policies should give to the executive the means of determining probable progressive hold-

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ing power and the type of physical institution to be provided. Curricular translation into physical needs was discussed at length in an earlier article on educational designing.

Administrative policies with respect to organization and the method of operating the instructional program now begin to play a definite part in the specific planning of the new physical plant.

The distance a child is expected to travel to school having been determined by the board of education, these policies will provide a means for selection of sites in the newly laid out school districts.

A General Picture Is Necessary

It must now be obvious why the foundation work of developing educational policies and of making a searching physical, economic and social survey of the community was so heavily stressed in the earlier stages of the study. The problem up to the present has been of a twofold character, each division being developed simultaneously. The early consideration and adoption of educational policy were essential not only to establish legal standards upon which to determine future needs but they were also employed as an appraisal agency in classifying the existing plant into groups of units to be retained and groups to be discarded. The gathering of facts relating to possibilities of need and the probable future physical character of the community will now serve as a base for the translation of these policies into physical needs.

With the exception of the appraisal of the existing plant, the major part of the work was concerned with the collection of facts and the education of the board to the adoption of comprehensive and far-reaching policies. From this point on, this information will be sifted and studied and re-studied and finally applied progressively to the planning and development of the plant.

The first actual step in the development of the plant is to use these policies and data to obtain a general picture of the extent of the needs. Spacing standards will permit the physical determination of the ultimate number of school districts for different classes of units. It is possible to determine in a crude way how many elementary districts must be established and what number of junior and senior high schools must be planned to serve the requirements set forth by these elementary districts.

It is not yet a question of site determination but rather of the preliminary application of spacing policies to the physical community, with a careful consideration of the peculiarities of terrain, of traffic, of industry and of commerce. These temporary district boundaries may be shifted con-

siderably when the problem reaches the final stages and all factors have been considered. This possible shift is of little consequence for, as a general rule, the total shifts will not affect greatly the number of proposed districts established as a first step.

If the survey has produced child and adult population density maps over a period of years, these tentative districts may be superimposed upon these maps by use of colored string. This procedure will give a clear outline of the successive problems of facilities to be provided. It will show the population segments to be considered by districts and it will enable the specialist to study the progressive changes in development. If a similar operation is performed for maps that indicate the degree and type of land utilization, correlative trends may be discovered.

After both data and policies have been applied to the problem and the general need tentatively determined, it is possible to have a gross picture of the possible future school plant requirements. The general overview is essential as a means of developing understanding and appreciation of the situation in its entirety. If the general facts have been firmly established, each subsequent and more detailed procedure will be considered and developed with the major problem being constantly borne in mind.

In actual practice all of these operations including the appraisal of the existing plant, are, in the case of the specialist, so well merged in progressive activity that it is difficult to separate them. It is well, however, for the beginner in this field, particularly the superintendent if he undertakes the study personally, to see clearly the logical succession of activities and to follow them in their time sequence. This practice will avoid confusion and will prevent the omission of essential phases in development.

After the general picture has been determined it is possible to consider in greater detail the best methods of disposal of the present or existing school plant.

Edison Abandons Scholarship Contest

A recent announcement says that Thomas A. Edison this year has abandoned his scholarship contest by which he picked the country's "brightest" high school graduate to send through college at his expense. Business conditions are given as the reason for abandoning the contest. Each contest, it is pointed out, including the cost of educating the winner, amounts to \$25,000.

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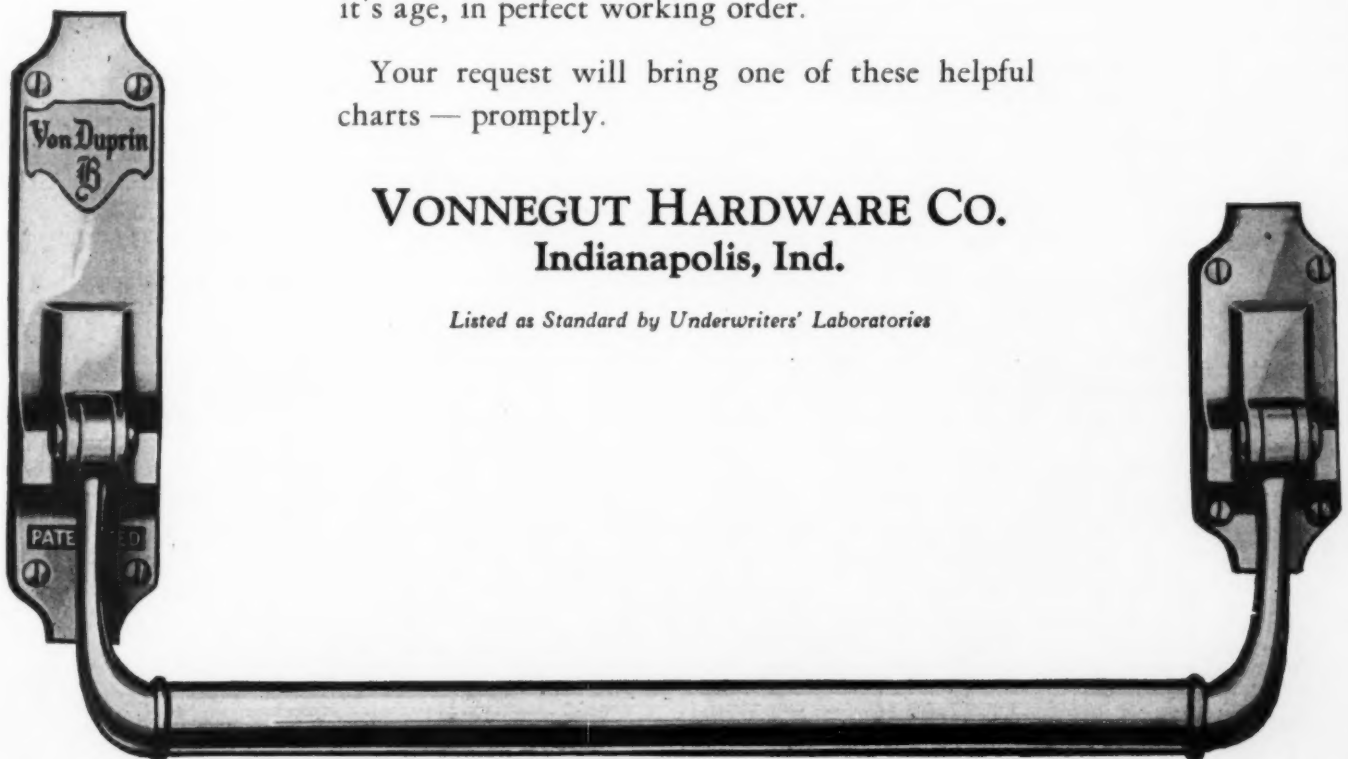
In many instances these charts have made possible the repair of old devices at nominal cost, without the necessity of sending them to the factory.

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Your Everyday Problems:*

Why School Bond Issues Fail

By JOHN GUY FOWLKES, Professor of Education, University of Wisconsin

IN THE June number of *The NATION'S SCHOOLS* a discussion was presented showing the frequency of school bond failures in Illinois, Indiana, Minnesota, Ohio and Wisconsin during 1928-30. Information concerning school bond failures is of little value to school boards and administrators unless the causes of such failures are also available.¹

Some people attribute the unprecedented increase in school building construction during 1919-25, with the accompanying school bond issues, almost entirely to the fact that the World War had delayed the construction of buildings so greatly that the period of 1919-25 was largely a

matter of "catching up" with a badly checked school building program. It must be admitted at once that the World War did much to retard school building construction prior to 1919-25, and hence that period was marked by great school building activity. On the other hand, it must also be conceded that factors entirely apart from a national crisis entered into the situation. In the first place, the postwar period was one in which this country became more keenly conscious than ever before of the importance of public schools. In the next place, this same period was one in which professional educators recognized the fact that some fundamental revision in the school curricula was essential. These two factors inevitably led to recognition of the inadequacy of old school plants and the necessity for suitable new school buildings.

*Discussions in this department deal with problems that frequently confront principals and superintendents. Inquiries on problems of this nature should be addressed to Doctor Fowlkes.

¹Inez V. Summers, graduate student at the University of Wisconsin has contributed the statistical part of this discussion.

TABLE I—CAUSES OF BOND ISSUE FAILURES IN 164 SCHOOL DISTRICTS OF 5 STATES

<i>Causes</i>	1928	1929	1930	<i>Total</i>
1. Amount of issue too large.....	1	..	1	2
2. Tax rate already too high.....	1	..	2	3
3. Proposed expansion unnecessary.....	2	1	1	4
4. Economic depression.....	2	3	5	10
5. Local disagreement on proposed site.....	3	..	1	4
6. Local disagreement on type of structure.....	1	1	2	4
7. Antagonism between factions.....	7	3	4	14
8. Lack of publicity.....	2	2	2	6
9. Other causes.....	5	1	2	8

TABLE II—CAUSES OF BOND ISSUE FAILURES IN 37 CITIES AND 47 COUNTIES OF OHIO

<i>Causes</i>	1928		1929		1930		<i>Total</i>	
	A ¹	B ²	A	B	A	B	A	B
1. Amount of issue too large.....	..	3	..	2	1	3	1	8
2. Tax rate already too high.....	..	3	..	6	2	5	2	14
3. Proposed expansion unnecessary.....	..	2	..	..	..	1	..	3
4. Economic depression.....	..	2	1	1	3	14	4	17
5. Local disagreement on proposed site.....	..	5	..	7	1	9	1	21
6. Local disagreement on type of structure.....	..	3	..	2	..	2	..	7
7. Antagonism between factions.....	1	9	1	10	1	14	3	33
8. Lack of publicity.....	..	3	..	1	..	1	..	5
9. Other causes.....	..	4	..	6	..	1	..	11

A¹—cities; B²—counties.



He Took Up the Draftsman's Pencil to Battle Constipation

The daily output of a lathe operator drops. A child grows listless and inattentive as the school day drags into afternoon. An office worker slumps idly at his desk, neglecting the work before him.

The boundless energy that drove a business genius to the top rung of the ladder, slips silently away, leaving only a dull clod of a mind and body.

Yet doctors tell us that constipation is really nothing but a habit—or rather the lack of one. It is a chronic disorder, of millions, induced by irregular evacuation during youth.

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His first attack was for the coming generation. It resulted in a closet bowl, efficiently designed to make evacuation easier and more certain for school children.

For many years careless designers had been inflicting high bowls upon children in school toilet rooms.

The seat of the Clow Bowl was lowered, 2 inches closer to the floor. The position of the child is

natural, with knees high and stomach muscles relaxed. Thus by making evacuation easier, regularity is made more of a habit.

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Many persons attribute the marked failure of proposed school bond issues during 1928-30 to general economic conditions. It must be conceded that the general depression, particularly during the last eighteen months, has contributed greatly to the failure of many school bond issues. But here again, several factors are controlling the situation. In the first place, the nation is relatively in a much better situation with respect to school buildings than it has ever been before. In the next place, despite the fact that the public still recognizes the importance of public schools, the present system of financing such schools has long since proved inequitable and inadequate; in the third place, as will be shown in the following discussion, quite often noneconomic factors are the controlling elements in the success of school bond issues.

It is hoped that the following discussion will prove helpful to boards of education and school administrators in the formulation and execution of long term school building programs. Sound school building programs certainly cannot be executed if the factors shown here are the determining influences in providing for proper physical plants for the boys and girls of this country during their public school experiences.

In the judgment of school superintendents, Table I shows why proposed school bond issues failed in Illinois, Indiana, Minnesota, Ohio and Wisconsin during 1928-30. It is significant that the most frequent cause of failure is that of antagonism between factions within the communities. Too often a desire to sell real estate, or personal prejudice, is the basis for deciding the educational needs of a community.

Desirable Personal Relations Necessary

Again on the basis of the judgment of school administrators, Table II shows why proposed school bond issues failed in thirty-seven cities and forty-seven counties in Ohio during 1928-30. Here again antagonism between factions is shown to be the most frequent cause of school bond failure. A close second is disagreement on the proposed site. These data are corroborative of those shown in Table I, and surely afford much food for thought for citizens and professional educators alike.

In the last analysis, administration is the establishment and maintenance of desirable personal relations. To be completely successful, an administrator must apply this thesis to the constituency of a community as well as to the school staff. Unless school administrators are able to observe this thesis, not only proposed school bond issues but many other major educational programs are doomed to failure.

"Alcohol, Hygiene and the Public Schools"

Forty-six of the forty-eight states have laws requiring public schools to teach the effects of alcohol and other narcotics on the human system, Amos W. W. Woodcock, director of prohibition, declared recently in a statement announcing the publication of a factual monograph entitled "Alcohol, Hygiene and the Public Schools."

Arizona and Wyoming are the two states which have no laws on the subject. In Wyoming, however, the matter is left to the discretion of the state superintendent of education.

This monograph was prepared by the division of research and public information of the Prohibition bureau for distribution to Federal and state officers and on request to anyone interested.

The monograph contains a digest of state and federal laws on the subject of hygiene and scientific temperance teaching in public schools, with a history of the law of each state, showing the first law enacted on the subject and bringing the record of the law down to January 1, 1931. It is shown that forty-six states of the United States have laws requiring the teaching in the public schools, of the effects of alcohol and other narcotics on the human system.

584 Institutions Offer Courses in Home Economics

Instruction in the study of home economics is now offered by 584 institutions of higher learning in the United States, according to the Office of Education in a statement just made public by the Department of the Interior.

Of this number 322 reported as having a four-year curriculum in home economics leading to a baccalaureate degree, 1,500 teachers and an enrollment of 37,619 students.

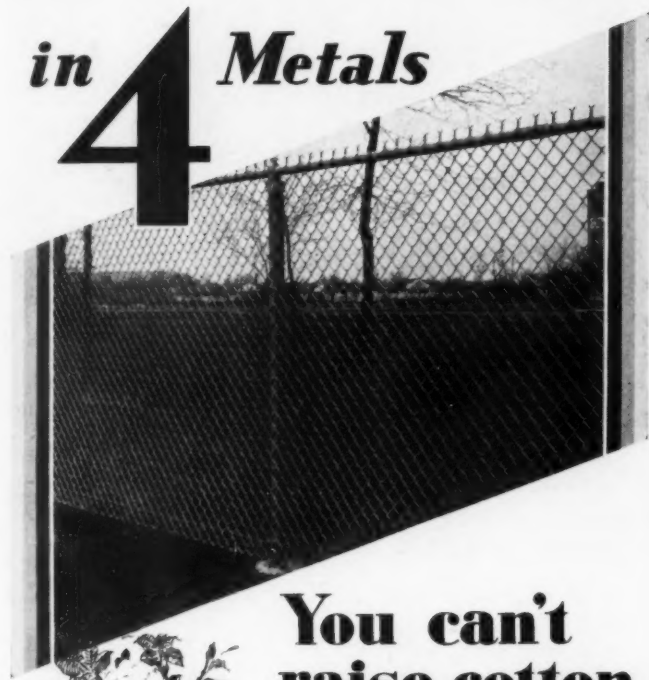
Eighty-eight of these institutions reported as having courses in home economics but not granting a degree in that subject. Seventy-eight of these have 176 teachers and a student enrollment of 3,502 students in home economics.

Ninety normal schools and teachers colleges reported as offering courses in home economics but not granting a degree in that subject and as having 137 home economics teachers. Eighty-three of these institutions reported as having enrolled 6,556 students.

Of the 584 institutions reported as offering home economics, 547 reported 50,640 students enrolled in this subject.

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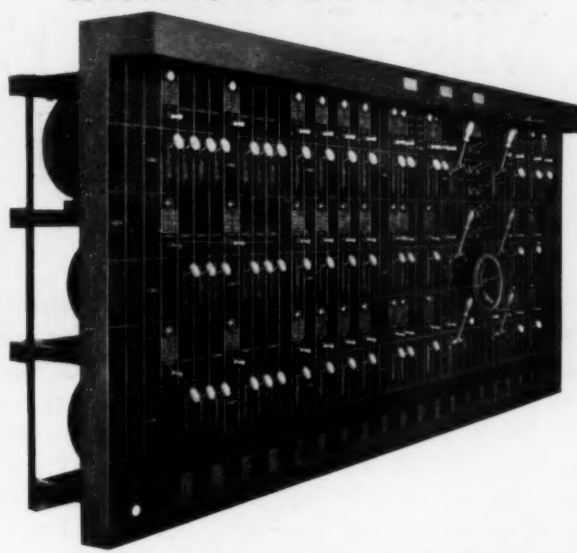
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Practical School Administration:

Miscellaneous Expenses That May Be Reduced to Save Money

By PHILIP C. LOVEJOY, Formerly Assistant Superintendent of Schools, Hamtramck, Mich.

BY "Other Expense" is meant those current expenses not properly listed under personnel or supplies. A list of them would include such items as fuel, rent, insurance, compensation, pensions, taxes, surety bonds, telephone, telegraph, light, power, laundry, freight, piano tuning, tuition, tax collecting, water, commencements, school banks, institutional care, transportation and special appropriations such as those for school athletics and for the school paper.

Here, again, it is possible to save money, possibly more than at other places, but care must be taken not to interfere with function unless we are sure that such a procedure is wise. Again we must not practice false economy. There are, however, many legitimate ways in which the school can save money and at the same time maintain an effective system.

There is the matter of commencements, for instance. Urbana, Ohio, states that the Woodstock High School in order to economize in times of depression worked out a unique program for commencement by eliminating the customary speaker on commencement night and having members of the senior class present the talks instead. Music was supplied by the school.

Economizing on Commencements

This school is to be complimented. Schools exist for the children. Parents pay taxes in order that their children may be educated. Commencement is possibly the one time in the year when a large audience of citizens attends a school function. Here is the time to show the taxpayers what is being done with their money. Who can better make this demonstration than the children who have received the benefits of the school for the longest time—those about to graduate? Possibly next year and the year after, whether the depression continues or not, the pupils in Urbana will present their own commencement. They will demonstrate abilities, skills and techniques acquired, they will show evidence of preparedness to assume their rightful place in the democracy

and they need not necessarily do it by means of talks.

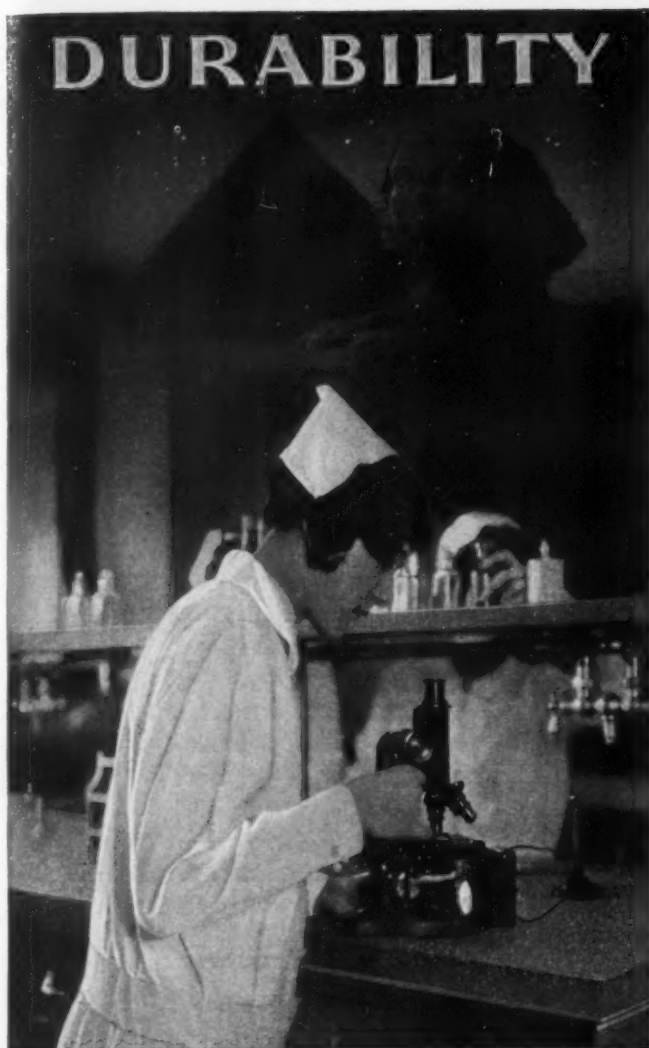
Many other cities in the country have found such vitalized commencements effective and inexpensive. Economy and progress have been achieved at the same time.

Plumbing Fixtures Must Be Watched

Every school system must have water. Some cities supply this to the schools free, as it is done in Highland Park, Mich. The cost of water may be reduced by the use of spring valve faucets and by the elimination of leaks. Why should fountains run when school is not in session? Why should worn out valves be permitted so that water drips from turned off showers. Why not test the meters when school is not in session and see how much unused water is being paid for? It is said that water leaking through a sixteenth-inch aperture will amount to about 204,000 gallons in a year's time.

The matter of broken glass is an important problem. This topic may not be classed under the head of other expense—possibly rather it comes under supplies for maintenance of buildings, but now is a good time to mention it. The school board in Chicago discovered that it was paying thirty-five cents per pupil per year for broken glass. The total bill was upwards of \$162,000 last year. In each of 101 schools, \$562 or more was spent for broken glass. The glass bill for the schools of Chicago would provide more than enough teachers for the entire city of Mount Clemens, Mich. Chicago's superintendent, William J. Bogan, has suggested several remedies: Keep premises free from "throwable" materials; prohibit ball playing close to the building; carry out a prompt investigation of the breakage; make every effort to apprehend the culprits, going to court if necessary; talk it up in school—assemblies, classroom and clubs; obtain community cooperation through reports to parents and to neighborhood groups.

The other day I talked to a man who lives in a town in which it was necessary to close the ele-



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mentary schools on May 22, 1931, because of a lack of funds. Somehow the high school principal convinced the board of education that the secondary schools should continue through the regular period. The situation in that town is so hopeless financially that teachers had to take cuts varying from 5 per cent to 12.5 per cent of their salary, with a promise of only seven months' work during 1932. The town in point is a town of splendid homes, of home owners and home lovers. Yet it does not have sufficient money to provide an education for its children. It is significant to note that in a community only eleven miles away from this same town a large moving picture theater established a new high record for gross receipts.

I asked the local telephone manager if the Rotary Club or the Lions and Exchange Clubs were doing anything about school finances. He could cite no instances. I asked him if the telephone equipment used by the board of education in its buildings was the most efficient and the least costly. He said he thought it was not. He was of the opinion that a single central switchboard for the entire system would be better than the individual building phones.

Diplomas, Power, Bonding

How large do school diplomas have to be? According to a recent report New York City has reduced its diplomas to what is known as the "apartment house" size. The cost has been lowered accordingly and a saving of nearly 50 per cent effected.

There is also the question of power rates. One school system in Michigan contemplated installing its own power plant. When the local power company heard of this, it lowered its rate so that the school system will save nearly \$4,500 annually on its present consumption. Lights should be turned off when they are not in use. One Michigan school conducted such a light saving campaign and reduced its light bill by almost \$2,000 in one year.

When telegrams are sent, voucher copies should be made and forwarded to the bookkeeper or accountant so that they may be checked against the bill. No extra nonbusiness messages can then creep in.

How are long distance telephone calls handled? Are they prohibited over the regular line unless registered by the clerk in attendance? Many schools have installed pay stations.

In the matter of surety bonds, much money can be saved by making a careful study of who is bonded, who needs to be bonded and for how much. Bonding is good business, but overbonding is a waste of money.

Does the school have too many printed forms? Are they all used? Possibly they are used on the back as scratch paper. That makes an expensive supply. I know a commercial organization that has approximately twelve different requisition forms where one would do for the reason that they cannot rely on the individual who orders them to state clearly what he wants. Why give it to him then? The costs of these extra forms, the storage space necessary for them and the possible attendant inefficiency of the executive using them might all be eliminated. Fewer forms mean economy and efficiency.

Other Opportunities for Saving

The matter of determining what is the right fuel for the school system is an important matter. Obtaining this fuel thereafter is also important. In *The NATION'S SCHOOLS* for August, 1929, this subject was discussed thoroughly.

Many school systems find it much cheaper to operate their own laundries than to send the work out. In the "School Economies" pamphlet recently published by the Michigan Education Association, there is mention of a school system that employed five full-time individuals in the laundry. Attention was given to the costs of the department by the assistant superintendent and it was discovered that by purchasing \$1,500 worth of secondhand machinery in addition to that on hand, it would be possible to operate the laundry with two regular employees with some possible additional part-time assistance. In the first year of this new plan, the machinery was paid for and the annual labor costs reduced a little more than \$2,000. Tumblers were installed for drying towels with exhaust steam, and the cost of gas to the system was reduced nearly \$600.

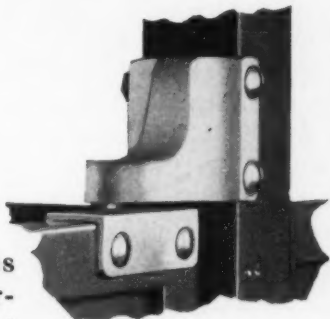
When I first took over the business affairs of a certain school system, I received a bill from the local authorities for a special assessment paving tax. It was for more than \$2,000. I merely put the bill in the back of my desk. A year later another one was received for the next installment. I filed that away, but decided that I would notify the city authorities that school districts in Michigan were not subject to special assessments. Of course the taxpayers themselves do not save this money, but it is not a proper charge against the school system.

How Taxes and Insurance Affect Schools

In that same system I found that payments were being made without benefit of refund on the state gasoline tax. A perusal of the state law clearly indicated that vehicles owned by the state or a local municipality were not subject to this tax.

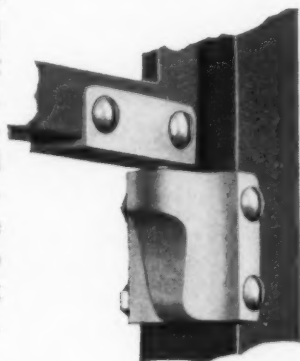
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Neither was the gas which was purchased for use in the auto shop or for use in the paint spraying outfits. Neither was it necessary to pay retail rates for licenses for the fleet of school trucks and busses.

The topic of insurance is a large one and would take too much space to develop here fully. It is wise economy to have the school plant reinspected rather frequently, at least once in two years. Each time my system was reinspected, additional economies in insurance rates were obtained. True, certain minor changes were made, but the savings more than offset the charges.

Then again the question of co-insurance on an 80-85 or 90 per cent basis needs to be analyzed, as well as correct appraisals and proper capital amounts for the principal sum of the insurance. I once found a school system which was, by its own statement, insured for 116 per cent of its estimated value. Certainly specific studies should be made in the field of insurance. In ten districts that were studied it was found that insurance varied from 1 per cent to 84 per cent of the estimated value.

It has not been intended that this article should be exhaustive, but rather that it should serve to direct the thought of those who are charged with caring for the expenditure of school district funds. Slight additional analyses will serve to reveal many ways in which money may be saved and efficiency retained.

What a Summer Recreation Program Should Include

That the relationship of a municipal recreation program to the school program is essentially a service relationship, is the opinion of C. E. Brewer, commissioner of education, Detroit. The problem of recreation executives is to obtain the same results as education, but not with the same methods, he says. School teachers conduct classrooms according to pedagogical rules already laid down while recreation workers must appeal through the interest and enthusiasm of the individual to accomplish the ends desired.

Mr. Brewer contends that recreation and education leaders should work in close harmony and all available facilities and equipment should be used to the advantage of all concerned. According to a report recently issued by the National Recreation Association, there were over 15,000 school buildings representing an investment of over \$5,000,000,000 in 748 cities, and yet there was an average of only one out of ten school buildings in those cities being used by the citizens of the community.


In the 748 cities, only 243 school boards permitted 1,254 school buildings to be used as evening recreation centers. In only 113 school boards were there divisions of recreation within the school system and nineteen other school boards partially supported a recreation program in their city by joining with some other city department in financing a recreation program. It is almost inconceivable that boards of education, intellectual as they are, could be so shortsighted in this matter.

All school facilities should be used after school hours in every possible way for leisure time activities. Activities that are similar to educational activities should be organized by recreation workers from the viewpoint of permitting the persons participating to do what they are interested in, that is, give them an opportunity to "ride their hobbies."

A summer recreation program for children should not only include active games but should include cultural activities, such as: woodcraft, model airplane and boat building, story telling, handicraft articles, pageantry and safety patrol work.

Progressive Steps in Rural Teacher Training

Progressive steps in rural teacher training are enumerated by L. W. Hacker, director, department of rural education, Illinois State Normal University, Normal, Ill., as follows: (1) specialized preparation of rural teachers in 85 per cent of the teachers colleges, (2) rural demonstration and practice schools established in nearly one-half of the teachers colleges, (3) leadership developed in local, state and national rural life clubs, (4) great increase in the number of colleges offering courses in the sociology of rural life, (5) increase in certification requirements, (6) decrease in recitations per day by the contract plan and by combining the social science subjects, (7) increase in the training of county superintendents, (8) increase in the number of supervisors of rural instruction, (9) improvement of training in service, (10) employment of special supervisors of health, attendance, art and music, (11) abolition of the idea of using the rural school as the "colts' pasture" for the beginning urban teacher, (12) extension of rural library service, (13) increase in leadership in state departments, (14) creation of larger school units, (15) cooperation with adult educational programs, (16) special pay and recognition for rural service and (17) bringing the best to the rural communities by community engineers.



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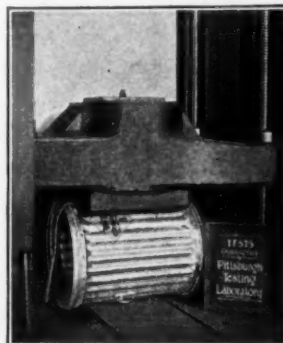
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News of the Month

Florence Hale Heads N. E. A. for the Coming Year

Florence Hale, state director of rural education, Maine State Department of Education, was elected president of the National Education Association at its annual meeting held in Los Angeles, June 28 to July 4. Henry Lester Smith, dean, school of education, University of Indiana, was elected treasurer. J. W. Crabtree is secretary of the organization.

Outstanding among the topics discussed at the convention were: "The Relation of Schools and Business"; "The Improvement of Rural Living" and "The Integration of All Education."

The program was formally opened on Saturday afternoon, June 27, with the opening of the exhibits. The address was made by Willis A. Sutton, president, with a response by C. G. Pearse, president, Exhibitors Association, Milwaukee.

A general session was held on Saturday evening on the theme: "Integration of All Education." President Sutton was in the chair. Appearing on the program were: George D. Strayer, Teachers College, Columbia University; the Rev. John Wolfe, superintendent, parochial schools, Dubuque, Iowa. Frank A. Bouelle, superintendent of schools, Los Angeles, presided at the vesper service on Sunday.

What the Pupils Think of School

"Youth Views Education" was the theme of one of the most interesting programs of the meeting. It was held on Monday morning. High school pupils presented their viewpoints of school and school responsibilities and problems, a symposium that was summarized by President Sutton.

"The Enrichment of Life" was the theme of the general session on Monday evening. In the chair was James A. Moyer, president, National Commission on the Enrichment of Adult Life.

Two sessions were held on Tuesday morning. "The Relation of Education and Business" was discussed by two different groups. Presiding at one session was Miriam D. Eisner, president, De-

partment of Classroom Teachers, and at the other, Helen Reynolds, school of commerce, Ohio University.

"Education and Business" was the theme of Tuesday's general session. It was discussed by Bess Goodykoontz, assistant commissioner of education, Washington, D. C., Augustus O. Thomas, president, World Federation of Education Associations, and W. C. Bagley, Columbia University.

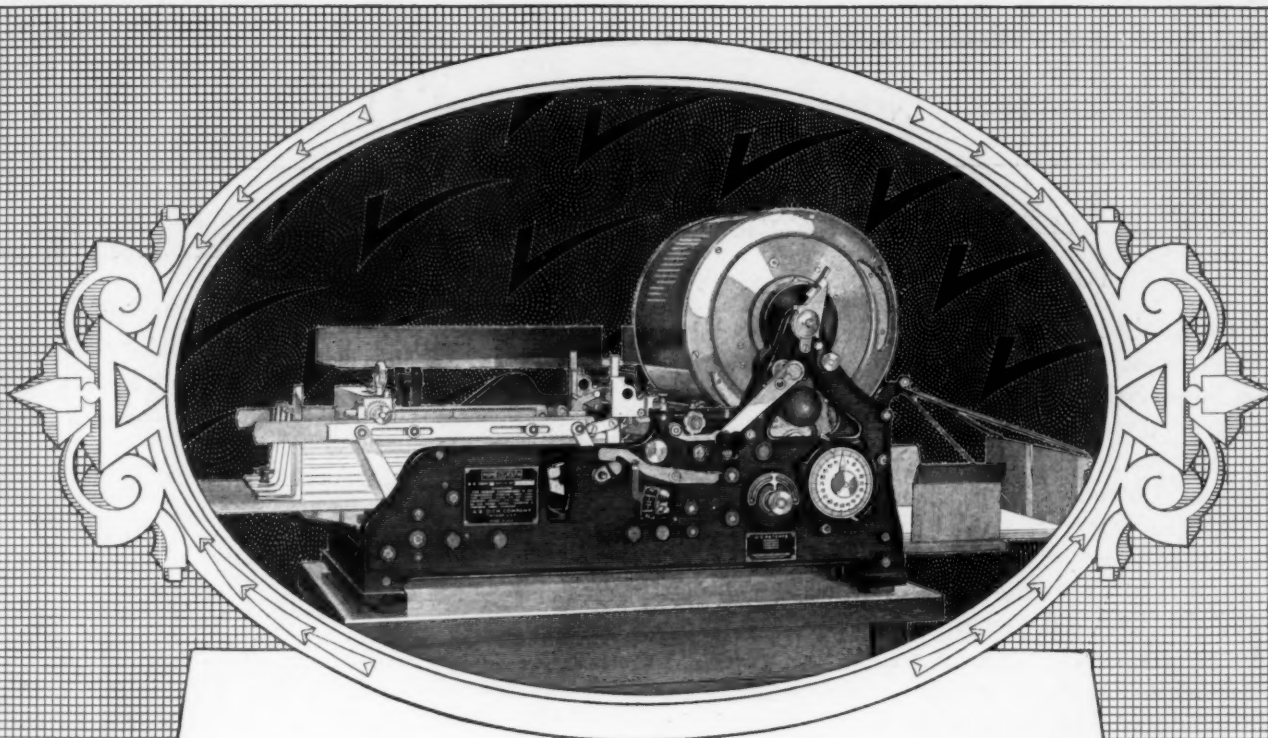
Discussing the Principal's Problems

The principal and his relationships was discussed at a joint meeting with the Department of Elementary School Principals on Wednesday morning. Cassie F. Roys, president of the department, occupied the chair. Speakers on this subject were: E. E. Oberholtzer, superintendent of schools, Houston, Tex.; Stella Holmes, principal, Bancroft School, Omaha, Neb.; Emma Wesley, John Faith School, Atlanta, Ga.; Mrs. Hugh Bradford, president, National Congress of Parents and Teachers.

A second session on Wednesday morning was devoted to a consideration of the White House Conference on Child Health and Protection. This meeting was held jointly with the Department of Superintendence.

A delightful diversion for the delegates was the Mission Play, presented on Wednesday evening in the Hollywood Bowl. The history of the California Missions is memorialized in this pageant-drama.

Three rural life conferences were held on Thursday—one in the morning, one in the afternoon and one in the evening. The next ten years in rural schools, the next ten years in rural life, and how the work of the national agencies can be coordinated to serve the rural child were the topics chosen respectively for the three programs. Kate V. Wofford, president, Department of Rural Education, presided at the morning session, and President Sutton at the other two sessions.



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M I M E O G R A P H



News of the Month (Cont'd)

Bill Will Seek National Broadcast for School Use

A national educational radio program, available to every schoolroom in the country, under government supervision, will be advocated in the next session of Congress by Senator Dill of Washington, joint author of the Federal Radio Act, who has just returned from a tour of Europe where he studied conditions relative to radio.

The plan is as yet undeveloped, but it is hoped that one may be worked out similar to that employed in England, where a national station, powerful enough to cover the country is used to broadcast the programs for schoolrooms. The difficulty to be overcome is the fact that radio in England is government controlled, while the co-operation of private control must be obtained in this country to make any such plan effective, Senator Dill explained.

Concerning conditions found by him in Europe, Senator Dill declared that "there is a general fear of communism throughout Europe to-day." In Germany, he said, communists spread propaganda not by talking against Germany, but by inducing prominent German communists to come to Russia and speak over the radio of better conditions in Russia.

Senator Dill said that radio is used for educational purposes in some European classrooms, and that he believes much benefit is derived from it.

In England, two or three periods of school programs are broadcast each day and the programs are sent out to all the schools that have radio receiving sets throughout the country. The programs usually consist of lectures or music that are considered of educational value.

The great difficulty in those countries lies in the fact that only about one-fifth of the classrooms are equipped with radio receiving sets, but in England they are beginning to work out a financial plan to secure sets for all classrooms.

All kinds of subjects are discussed during these educational broadcasts.

The Federal Radio Commission could take charge of the matter in this country and arrange some plan if it would take the initiative but something should be ready to present to the Congress by the next session, according to Senator Dill. It is necessary that if such a plan would prove successful, the Federal and state governments should

cooperate in taking over the control of the programs so that the proper subjects and ideas would be presented.

The system of the control of the broadcasts being in the hands of private companies and individuals is much better than that of having the control vested in the government, Senator Dill said.

American Education Week Set for November 9-15

The eleventh annual American Education Week, under the sponsorship of the American Legion, the Office of Education and the National Education Association, will be observed November 9-15. American Education Week each year includes Armistice Day. It is the purpose of this annual event to acquaint the public with the aims, achievements and needs of the schools.

The program of the week emphasizes that broader ideal of education as set forth in the seven cardinal objectives of education as defined by the National Education Association: health and safety; worthy home membership; mastery of the tools, techniques and spirit of learning; faithful citizenship; vocational and economic effectiveness; wise use of leisure; ethical character.

The general program of the week, as outlined here, will be adapted to the needs of each state and community in which it is carried out.

November 9—What the Schools Are Helping America to Achieve in Economic Progress.

November 10—What the Schools Are Helping America to Achieve in Child Health and Protection.

November 11—What the Schools Are Helping America to Achieve in Citizenship and Loyalty.

November 12—What the Schools Are Helping America to Achieve in Improvement of Rural Living.

November 13—What the Schools Are Helping America to Achieve Through a Higher Level of Intellectual Life.

November 14—What the Schools Are Helping America to Achieve Through the Enrichment of Adult Life.

November 15—What the Schools Are Helping America to Achieve Through High Ideals of Character and Home Life.

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Many vital improvements have been made in drinking methods, but, heading the list is the R-S Vertico-Slant Sanitary Fountain.

This fountain never feels the touch of contaminated mouths and lips. It prevents them from even coming close to the jet that spouts the water.

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News of the Month (Cont'd)

Information Sought by A. L. A. on Books Sold by Agents

The American Library Association is asking teachers and school librarians to collect information on books and sets commonly sold by canvassing agents, which may be used in reviewing these works in the *Subscription Books Bulletin*, published by the association.

In its first year, the *Bulletin* has reviewed sixty-five books and sets with impartial and outspoken comments. To continue this service, the Subscription Books Committee of the association must have information, often difficult to obtain, on the books and sets not yet reviewed.

Because some publishers do not wish their sets reviewed and sometimes fail to reply to correspondence, information about sets must be gleaned from persons who have had experience with the sets. Among the points in which the committee is most interested are whether or not sets are as represented by their agents, whether they are reliable, up-to-date, well arranged and adequately indexed. Comments on their general make-up, printing and binding, illustrations and their usefulness in schools, homes or libraries, will also be welcomed. Comparisons with other similar works would be helpful.

Information may be sent to May Wood Wigginton, of the Denver Public Library, who is chairman of the committee.

Bill to Allow Teaching of Evolution Defeated in Tennessee

The Tennessee house of representatives has voted against the repeal of a statute which prohibits the teaching of the theory of evolution in schools supported wholly or in part by state funds. The vote was fifty-eight to fourteen.

New \$375,000 Union Building for Michigan State Normal

A new \$375,000 Union Building is under construction on the campus of the Michigan State Normal College, Ypsilanti. The cornerstone was laid at the close of the thirteenth annual midyear

education conference. It has been named Charles McKenny Hall in honor of Doctor McKenny, the thirteenth president of the college, who has served here for the past nineteen years. The Union will be the sixth building to be erected during his administration. The other five are: the Administration Building; Pease Auditorium; Roosevelt and Lincoln High Schools and the new library built last year.

News Reels to Be Utilized in History for Schools

Utilization by educational institutions of large quantities of news reel film unsatisfactory for commercial exhibition purposes is planned under a program drafted by the Office of Education in cooperation with representatives of a leading motion picture corporation, Bess Goodykoontz, assistant commissioner of education, has announced.

Consecutive narratives relating to one educational topic will be pieced together from old films heretofore discarded by the corporation.

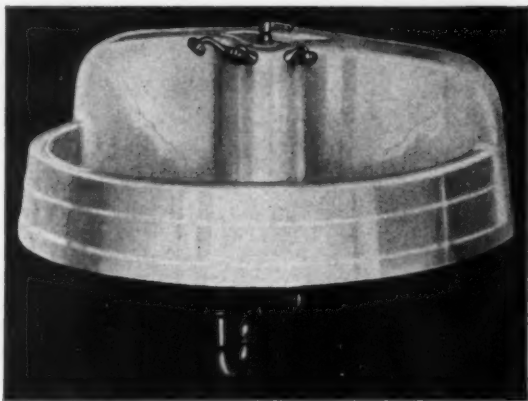
Upon the request of the producing company, the commissioner of education, Dr. William John Cooper, appointed a committee to meet in an advisory capacity with representatives of the company. Miss Goodykoontz acted as representative of the Office of Education. Already a series of films has been prepared and will be presented in the form of an experiment with a group of children in Washington in a few weeks. The company has films of presidential inaugurations as far back as McKinley. These were sorted, and a systematic and continuous film has been made from them on this phase of current American history.

Another film is entitled "How the World Prays." In it are presented scenes from various religious ceremonies by peoples throughout the world. Songs, charts, bells and music are reproduced, but in order to prevent any disharmony, there is superimposed a muffled musical composition in harmony with the general theme.

Other topics have been linked together and in some instances a lecture has been superimposed over the film so that throughout the picture there is a synchronized explanation.

A large number of films will be available in a short time. Their distribution will soon be possible. It is the plan of the company to make them available to schools at a low price.

The **EBCO** SEMI-CIRCULAR WASH SINK

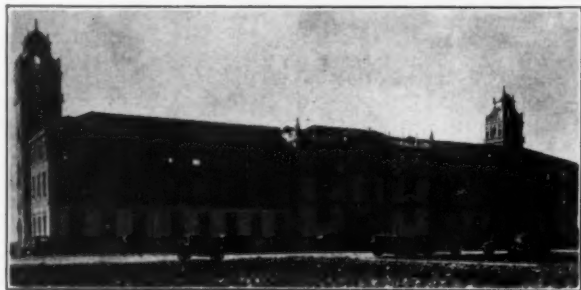


The EBCO acid resisting finish, individual control sprays, temperature control, automatic pressure regulation, check valves, strainers and stops, recess soap tray or liquid soap equipment are some of the features embodied in this attractive unit. An ideal wash room equipment for schools. Width 36", projects 22", depth 8".

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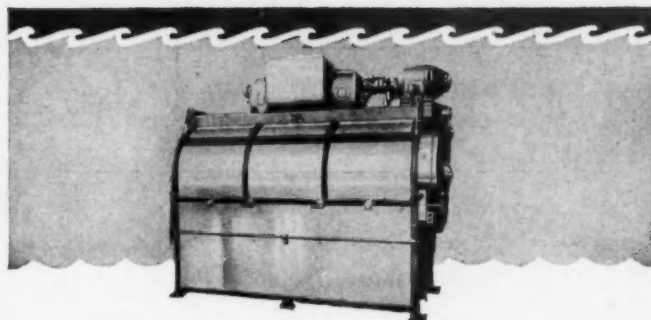
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When Should a School Operate a Laundry Plant?

THIS question is answered by one of New York City's leading consulting engineers, in an unbiased report now ready for distribution. Whether or not you are contemplating the installation of a laundry plant in your school, you will find this study of interest and value. Write for a copy.

Incidentally, if you have a particular laundry problem put it up to the Troy School Advisory Service, which offers its assistance, without obligation.

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Potter Fire Escapes are constructed in strict accordance with Underwriters' Laboratories specifications.

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1861 Conway Bldg., Chicago, Ill.
*Over 3,080 Potter Tubular Slide Fire
Escapes now in use, many with service
records and no death or injury reports.*

News of the Month (Cont'd)

Bulletin for Remodeling the "Little Red Schoolhouse" Is Available

The old-fashioned one-room "little red schoolhouse" is now out of date, and plans for remodeling it to improve lighting, heating, ventilation and general equipment are contained in a bulletin compiled by the Office of Education.

In spite of the fact that one-room schools are being absorbed by consolidated schools throughout the country, there still remain 150,000 schools of this type, the office points out. Many of these are sound structurally and can be changed to satisfy modern demands, it adds.

Rearrangement of windows, elimination of the old, rusty, dirty box stove, and introduction of innovations such as workrooms, first-aid cabinets, auditoriums and bookcases, constitute some of the proposed architectural changes.

The windows should all be moved to the left side of the children as they sit at their desks. Windows that are too low ought to be raised so that the light will come from above.

Probably more children have to leave school because of defective vision than for any other cause, the bulletin points out, stressing the importance of proper lighting. The area of clear glass in a schoolroom, investigations have revealed, should be equal to one-fifth of the floor space.

The old, rusty, dirty box stove, mounted on half bricks, with a rusty stove pipe, that usurped the center of the room is ruled out. A jacketed stove set in the end wall is recommended in place of it. When enough space is available separate cloak rooms for boys and girls with screened lunch shelves can be built at one end with a vestibule between them to shelter the entrance.

Floor plans and suggestions for new buildings are also given in the bulletin together with the plans for remodeling old schools. Six plans for one-teacher schools, five plans for two-teacher schools, two for three-teacher schools, and one vocational and agricultural school design are presented.

Notable among the innovations in rural schools are the workrooms in which the pupils learn manual training, sewing, cooking, canning, millinery and obtain laboratory training for agriculture; folding doors between classrooms, that make it possible to throw the whole building into one auditorium for community assemblies, and the

furnaces relegated to the basement. First-aid cabinets, fire extinguishers, bulletin boards and exhibit cases for trophies are also considered essentials for the modern rural school.

Men and women trained in the old type country school would discover one important item of the "little red schoolhouse" absent. The platform that raised the teacher and her desk on a dais from which she looked down upon her class is gone. The teacher of to-day wants to be on a level with her pupils and she has found the old platform just something to stumble over.

Pennsylvania Educators Take Steps to Improve School System

A movement designed to improve Pennsylvania's educational system has been begun, according to a statement by the state department of public inspection.

Twenty-five men and women, representing different fields of educational activity in Pennsylvania, met with Dr. James N. Rule, state superintendent of public instruction, recently and inaugurated the movement.

The discussion revealed a unanimity of opinion regarding:

1. The urgent need of a financial program that will ensure to the school districts of the state sufficient appropriation.
2. The necessity of improving the glaring inequalities of opportunity and the educational handicaps of rural children.
3. The necessity for a systematic study of the teacher question from the standpoints of training, and supply and demand.
4. The necessity for assembling under convenient heads the various school laws of the state through a recodification of the school code.

It was decided that these constitute major educational problems pressing for solution; that a study of remedial measures should begin immediately, and that later, committees should be organized to deal with the following questions:

Elementary education, including preschool and kindergarten; secondary education, including junior college; higher education, continuing education, vocational education, radio and other sensory aids, library service, health education and service, guidance and home school relationship, and school housing and equipment.

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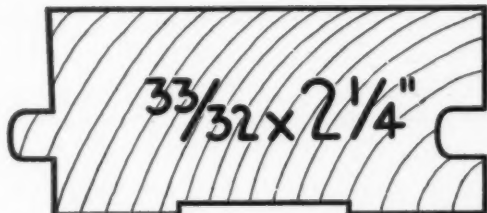


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News of the Month (Cont'd)

Pupils Show Board What They Want in Their School

Pupils of the Hamilton Township High School, near Obetz Junction, Ohio, told their school board, in a graphic manner, what they want in their new school building and grounds, down to the last tree on the landscape, when they presented to the board a cardboard model built in miniature and representing every feature they think they should have in their new educational plant, according to the *Columbus Dispatch*.

The model was prepared by twelve pupils in the class in architectural drafting. First they drew the plans for the building which will stand on a ten-acre site. They want two tennis courts, a football field, two basket ball courts. The approach to the school must be landscaped, providing a park for rest and recreation. They have provided for a parking lot. They would like to have a golf course, a cinder path for track events and even a place for bait casting practice.

In the building, three stories high, they have made designations for an auditorium, a gymnasium, a library, offices, laboratories, recitation rooms and appropriate rest rooms for both boys and girls.

The model building is made of cardboard. Windows are of oiled paper. A composition board was used for the grounds. Sponges of various kinds and pine cones are fashioned into shrubs, trees and hedges. Even birch bark is used on the birch trees that adorn the school grounds.

All have been carefully painted and finished, down to the plaster of paris benches and the metal replica of a Lincoln statue on the approach to the building. The final feature is the toy school bus painted orange, on the school roadway.

School Broadcasting Assured for Norway

School teaching by radio became an accomplished fact in Norway recently when the pupils of some 150 schools listened in to an instructor broadcasting from a central station in Oslo, according to a recent announcement.

This experiment was carried out after the matter had been discussed for some time between government, radio and school authorities and resulted in the Broadcasting Company of Oslo allow-

ing 20,000 crowns (approximately \$5,300) in its budget for future school broadcasting. It is believed by the originators of the plan that not only will this innovation provide a new medium of education but that it will also stimulate the use of radio sets in the home by those who wish to benefit from the "instruction by air."

Western Reserve Women's College Has New Name

The name of the College of Women, Western Reserve University, Cleveland, has been changed to "Flora Stone Mather College of Western Reserve University" and the diplomas to the graduating class in June were issued under the new name.

For some years the question of a distinctive name for the college has been considered.

Appeal From Decision to Uphold Flunking Student

Gilbert Bettman, attorney general of Ohio, has announced that he will participate in an appeal from the decision of the common pleas court at Sidney, Ohio, holding that a university maintained by state funds cannot dismiss a student on the sole ground of inability to pass the required number of subjects.

The decision was rendered in the case of Jean West v. Miami University, and the university was permanently enjoined from dismissing the student.

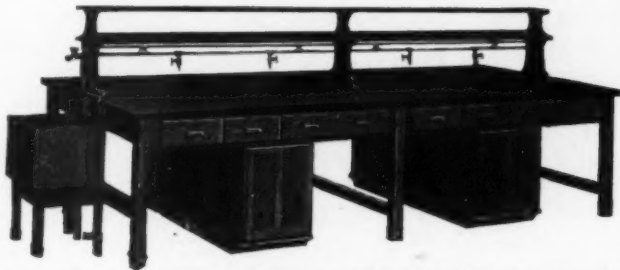
"I am advised," said the attorney general, "that the decision in this case adds tremendously to the problems of public educators in all of Ohio's publicly supported institutions of higher learning, which are already having difficulty in meeting the public demand for higher education with inadequate personnel and equipment, due to a limitations upon funds available.

"It is my understanding that this situation is especially true of Ohio State University. For this reason, I am advising Dr. A. H. Upham, president, Miami University, that I will cooperate in every way with the attorneys representing the university and will ask leave of the upper courts to appear and file briefs as a friend of the court."

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939 STUDENT'S DOUBLE PURPOSE LABORATORY TABLE (Chemistry and Agriculture) desirable when limited space will not permit separate laboratories.

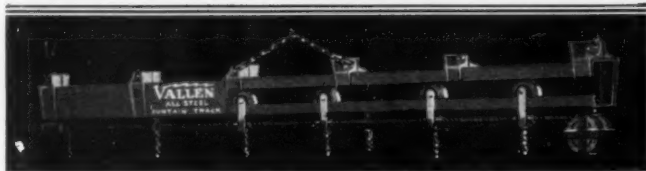
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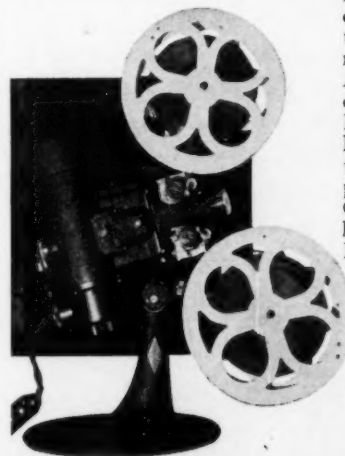
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Left—The New Filmo 57-CC 375-watt Projector. 375-watt models, \$215 up. 250-watt models, \$198 up.

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In the Educational Field

G. W. NICHOLS, superintendent of schools, New Brookland, S. C., has resigned to head the schools of Irmo, S. C.

FREDERICK W. SHEARER, acting superintendent of schools in the City School district, Middletown, Conn., has been elected superintendent, succeeding the late EDWARD B. SELLEW, who died September 9, 1929.

H. T. MARSTELLER, principal, Somers Point Public Schools, Somers Point, N. J., has been elected to the newly created position of superintendent of schools.

CHASE MACARTHUR is the newly appointed superintendent of schools, Foxboro, Mass. MR. MACARTHUR has been for the past two years principal of the Foxboro High School.

GRANT T. MOYERS, superintendent of schools, Malverne, L. I., New York, resigned recently.

FLOYD C. FRETZ has been named supervising principal of the schools of Downingtown, Pa., succeeding A. B. MOYER, resigned. He was before his election supervising principal, Unionville Consolidated Schools, Unionville, Pa.

ARTHUR B. ROWELL, for twenty-eight years superintendent of schools, Glencoe, Ill., has retired. FREDERICK L. REDEFER, assistant superintendent at Glencoe, will succeed MR. POWELL.

WAYNE R. PARMER, Jenkintown, Pa., has been named superintendent of schools, Belleville, N. J., succeeding GEORGE R. GERARD, resigned.

J. W. JONES succeeds Q. L. WRIGHT as superintendent of schools, Viborg, S. D. MR. WRIGHT becomes superintendent at Gregory, S. D.

E. S. BLACK, Mukilteo, Wash., has been elected to the superintendency at Bothell, Wash.

EDWARD J. RUSSELL has been named assistant superintendent of schools, Pittsfield, Mass., succeeding MARTIN L. HUBAN.

DR. B. O. SKINNER, president, Wilmington College, Wilmington, Ohio, has been named to succeed DR. JOHN L. CLIFTON as state director of education for Ohio. DOCTOR CLIFTON'S term expired on July 14.

G. G. RICKER, head of the chemistry and physics department, Bridgeport High School, Bridgeport, Ill., is the newly elected superintendent of schools, Vandalia, Ill.

J. J. PHILLIPS, superintendent of schools, Lancaster, Ohio, died recently. DEAN M. HICKSON, principal of the high school, has been named acting superintendent.

W. C. RYAN, superintendent of schools, Metaline Falls, Wash., has been appointed deputy superintendent of schools for Spokane County.

E. D. DENISON, superintendent of schools, Lake Geneva, Wis., has resigned. He is succeeded by CLARENCE HODGE, Aurora, Ill.

THE REV. WALTER R. WILLIAMS has resigned as superintendent of schools, Unionville Center, Ohio, to enter the ministry.

CARL C. WOLLNER, superintendent of schools of Spencer County, Ind., died recently following an operation for appendicitis.

FRANK C. RANDELL, superintendent, Dunkirk, Ohio, has been elected to the superintendency of Hardin County.

J. WARREN AYER has been named superintendent of schools, Monrovia, Calif., succeeding A. R. CLIFTON, who now heads the schools of Los Angeles County.

EMIL KRATOCHVIL, superintendent of schools, Clay Center, Kan., died recently.

HOMER B. WOOD has resigned the superintendency of Rush Township, Ohio, to become superintendent of schools, Fredrickstown, Ohio.

C. O. RUTHERFORD, superintendent of schools, Adario, Ohio, has accepted the superintendency of the schools of Mt. Eaton, Ohio.

DR. CLARENCE H. DEMPSEY, commissioner of education of Vermont, has recently been chosen superintendent of schools, Arlington, Mass., succeeding CHESTER A. MOODY.

DR. JOHN J. RICHESON, superintendent of schools, Youngstown, Ohio, has resigned.

W. W. WRIGHT, Hope, Kan., is the newly elected superintendent of schools, Highland Park, Kan.

F. H. KENDALL has resigned as superintendent of the schools of Lake County, Ohio, and JOHN R. WILLIAMS has been appointed to succeed him.

PAUL PORTER is the new superintendent at Morrow, Ohio.